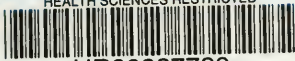


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TWENTY-SEVENTH ANNUAL REPORT
OF THE
STATE BOARD OF HEALTH,
OF THE
STATE OF RHODE ISLAND,
FOR
THE YEAR ENDING DECEMBER 31, 1904.
AND INCLUDING
THE REPORT UPON THE REGISTRATION OF
BIRTHS, MARRIAGES, AND DEATHS IN 1903.



PROVIDENCE :
E. L. FREEMAN COMPANY, STATE PRINTERS.
1911.

MEMBERS

OF THE

RHODE ISLAND STATE BOARD OF HEALTH.

Post Office Address.

ALBERT G. SPRAGUE, M. D., *President*.....RIVERPOINT.....KENT COUNTY.
SAMUEL M. GRAY, C. E.....PROVIDENCE.....PROVIDENCE COUNTY.
JOHN C. BUDLONG, M. D.....PROVIDENCE.....PROVIDENCE COUNTY.
REV. GEORGE L. LOCKE.....BRISTOL.....BRISTOL COUNTY.
ALEXANDER B. BRIGGS, M. D.....ASHAWAY.....WASHINGTON COUNTY.
RUFUS E. DARRAH, M. D.....NEWPORT.....NEWPORT COUNTY.
GARDNER T. SWARTS, M. D.....PROVIDENCE.....PROVIDENCE COUNTY.

GARDNER T. SWARTS, M. D., *Secretary*.

GENERAL CONTENTS.

GENERAL REPORT OF THE SECRETARY.

EXTRACTS FROM REPORTS OF TOWN OR CITY CLERKS AND HEALTH
OFFICERS.

EXAMINATION OF WATER SUPPLIES.

EXAMINATION OF RAW AND TREATED SEWAGES.

METEOROLOGY.

BIRTHS, MARRIAGES, AND DEATHS FOR 1904.

REPORT OF CONTAGIOUS DISEASES.

TUBERCULOSIS: EXAMINATION OF SPUTUM, AND RECORDS OF DEATHS
FROM TUBERCULOSIS.

DIPHTHERIA: EXAMINATION OF CULTURES.

TYPHOID FEVER: EXAMINATION FOR THE WIDAL REACTION.

MEDICAL PRACTICE ACT: EXAMINATION OF APPLICANTS, AND
REVOCATION OF A LICENSE.

SANATORIA FOR CONSUMPTIVES.

INSPECTION OF STEAMBOATS.

CONTROL OF WATER SUPPLIES.

INDEX.

To the Honorable General Assembly:

In compliance with the General Laws, the Annual Report of the State Board of Health is hereby respectfully submitted.

GARDNER T. SWARTS, M. D.,

Secretary.

GENERAL REPORT.

The work of the State Board of Health during the year has been a continuation of the study of the various conditions pertaining to the public health of the State, utilizing the various improved methods of investigation; and the examination of physicians desiring certificates authorizing them to practice medicine and surgery in the State.

CONTAGIOUS DISEASES.

During the year the monthly reports of the health officers of the several towns were received giving the number of cases of contagious diseases occurring in each city and town.

The only diseases which are reportable by physicians are scarlet fever, diphtheria, and typhoid fever. Some few report the prevalence of measles and whooping cough.

During some years there appears an unusual prevalence of one or more of these communicable diseases. This year a very material increase in the number of cases of scarlet fever was recorded. There were reported 1,816 cases of this disease as compared with 760 cases reported the year previous, which latter number is near the average for many previous years. The amount of diphtheria and typhoid fever was about the usual amount.

WATER SUPPLIES.

No changes have been in the water supply of Woonsocket. Constant inspection of the water-shed, which is owned or controlled by the city, is maintained. The color of the water remains high, but its bacterial and chemical analyses show it to be a safe water for public consumption.

During the year some alarm was occasioned on account of the possibility of contamination of the supply occurring from faecal matter, which was being deposited upon the water-shed of the supply by laborers, who were engaged in the construction of a trolley line to connect the cities of Woonsocket and Providence.

Prompt action on the part of the board and of the municipal authorities of Woonsocket led to an immediate correction of the conditions. A detailed description of the methods adopted are given in another part of this report.

The same conditions exist on the water-shed of the Newport water supply as have been found for years. The company maintains a close watch upon the portion of the supply obtained from the brooks contributing to the supply. The question of filtration of the supply has been considered, but some doubt is expressed whether the quantity of the supply would be sufficient to guarantee satisfactory washing of filtering beds.

The status of affairs with the Bristol and Warren Water Company supply has remained the same as for many years past. The demand of the town of Bristol to take over the possession of the water service under the terms of the franchise with the water company having been made, the question as to valuation in purchase by the town became a difficult one. The contention was made that the company was not in a position to sell water rights and privileges of the water-shed from which water was collected because much of this was controlled by the town of Warren. It was maintained that the quality of the water was such that the company had not a valuable asset in the form of a potable water, and that the equipment for pumping and distribution was of such poor quality in material and in form of construction that it would be difficult to determine a valuation.

The question was therefore submitted for arbitration to a master, who has held hearings and secured evidence in the case. These proceedings being determined adversely to one side or the other at different times, new hearings were held and the case has dragged on from year to year.

In the meantime the high color and woody taste of the water, which had always existed, continued. The complaint against the water company which had been made by the State Board of Health, for continuing to supply a water which was declared to be open to the danger of pollution at any time, still held.

The conditions complained of were not corrected, and the only action taken by the water company was to file a negation to the terms of the complaint. The reports and action taken by the board are to be found in the annual reports of 1902 and 1903.

The water supply of Pawtucket continues to be of the same good quality as heretofore, constant supervision and inspection of the water-shed being maintained.

The bed of coarse gravel and charcoal which was installed many years ago as a filter continues to remove coarse bits of sticks and leaves, but serves no other purpose.

The erection of a slow sand filtration plant at Pettaconsett pumping station for the purpose of purifying the water supply of the city of Providence, taken from the Pawtuxet river, which was commenced in 1902, has been advanced as far as the retaining walls and banks for six one-acre beds and the sand or filtering material for three of them. No provision for covering the beds is contemplated by the city.

The other supplies in the State have received no material additions or changes. The Wakefield Water Company supply continues of the same high color, but the chemical constituents show no material pollution. The Westerly supply continues to furnish the best water for public supply existing in the State.

EXAMINATION OF WATER SUPPLIES AND SEWAGE.

The regular routine examination of all public water supplies of the State has been continued and valuable data is being acquired by the board, which is of practical use in showing the variations in the supplies when they occur from time to time. A tendency to deterioration can be discovered in any supply by the periodic tests,

which have been made monthly, or oftener in some cases. The proper authorities have been notified of changes observed and they have willingly taken action on suggestions offered for any improvement of conditions.

The study of the efficiency of the mechanical filtration plant at East Providence has been continued, and shows that this plant maintains its ability to purify the water supply to a satisfactory quality.

Samples have been taken at regular intervals to determine the efficiency of the purification processes in use at the several sewage disposal plants of the State.

Comparison of the records of the analyses of these samples has enabled the engineers of the cities using some form of purification to determine which method of purification is best adapted for treatment of the particular sewage wastes of each city. These differ very materially from each other. At present purification plants are in operation in Pawtucket, Central Falls, Woonsocket, and Providence.

The work of the chemical laboratory has been done by Mr. Ernest F. Badger, S. B., who has held the position of chemist of the board since the establishment of the chemical laboratory in 1900.

PROTECTION OF WATER SUPPLIES.

For the better protection of the water-shed used for the collection of the water supply of the city of Pawtucket and towns receiving the same supply, a legislative amendment was made to Chapter 491 of the Public Laws, which already gave protection to the city of Woonsocket. This chapter, which gave the power of injunction to the State Board of Health against anyone who might maintain a possible source of pollution, was also desired by other cities and towns having public water supplies. The districts now so benefited are the cities of Pawtucket, Woonsocket, and Newport; the towns of Bristol, Warren, East Providence, Narragansett, and Jamestown; and the East Greenwich Fire district.

All the cities of the State were included except the city of Providence, which receives its supply from the Pawtuxet river.

Under the provisions of this law the existence of a source of pollution consisting of the drainage wastes from certain piggeries, and also collections of excrementitious matters from mills and stables, was reported to the department. This material had been deposited in such a manner that the surface drainage carried the waste matters into the stream of the Abbott Run, supplying the city of Pawtucket.

Prompt action by injunctions produced immediate correction of conditions.

An investigation and inspection of the waste material from manufacturing and the sewage wastes from a part of the town of Attleboro, in Massachusetts, was made, and the amount of pollution noted. Co-operative action with the Massachusetts authorities was not obtainable through the State Board of Health, but the operation of the mechanical filter plant at Hunt's Mills sufficiently purified the water to make it potable and safe for domestic use.

WIDAL TEST FOR TYPHOID FEVER.

The Widal reaction or test of samples of blood submitted by physicians for examination in cases of suspected typhoid fever has been utilized for the purpose of confirming the diagnosis of the physician when the symptoms of the disease were not sufficiently characteristic in some cases. It has served to assist the physician in taking precautions against the spread of the disease in the family where it has occurred.

TUBERCULOSIS.

The special appropriation for the study and prevention of tuberculosis made available by the General Assembly was increased to \$1,500. The increased attention given to the diagnosis of the disease by physicians has increased the number of cases where examination of the sputum has been asked for. This is done free for physicians in

cases where the disease is suspected of being present. At times the result is only confirmatory to the very positive physical signs discovered by the physician. In other cases the physical examination may reveal only a few symptoms of the disease. If there is sufficient amount of sputum expectorated it is usually possible to determine the presence of the bacillus, or micro-organism producing this disease, during the active stage.

Literature and directions for care of those sick with the disease, have been distributed to physicians having cases of tuberculosis under their care, to be given by him to the patient or some member of the family at his discretion.

As a special precaution spit cups for the use of those having consumption have been distributed free to all who might apply for the same. As these can be destroyed with their contents at frequent intervals this serves as a valuable assistance in the prevention of the careless spread of the sputum which is a factor in the cause of the disease. The careless spitter is not only thus taught a means of securing cleanliness and safety for others, but is also impressed with the opportunity to prevent the disease being ingested or inhaled by himself and producing the disease in other part of his own system.

In 1903, the board of aldermen of the city of Providence, on recommendation of the health department, and with the endorsement of the Providence Medical Association of such action, passed an ordinance or health rule requiring that all cases of tuberculosis should be reported at once by physicians who might have such cases occur in their practice. Results of this action are to be found in the extracts from the report of the superintendent of health in another portion of this report. As was anticipated, only a small proportion of the cases occurring were reported; the number of deaths occurring and registered far exceeded the number of cases reported before death.

State Sanatorium.—The buildings of the State Sanatorium were completed under the commission at the end of the year, leaving only the furnishings and equipment necessary for operation of the plant

to be supplied, and provision for the installation of a sewage disposal plant to be made.

Pine Ridge Camp.—The out-door summer tuberculosis camp started in 1903 in the town of Foster in tents was continued in 1904, in a more substantial housing.

Hillsgrove Tuberculosis Hospital.—During the year there was commenced a movement for the installation of a tuberculosis hospital at Hillsgrove by the St. Joseph's Hospital, to be utilized as an annex or branch of the general hospital in Providence. This is intended as a retreat for cases of all forms of tuberculosis both incipient and advanced, the first effort which is being made for the care of the latter class of cases.

DIPHTHERIA.

The board was given a special appropriation of \$3,500 for the study and control of diphtheria.

Under this provision it was possible for the board to provide for examination of the secretions from the throat and air passages of cases of suspected diphtheria, and to assist the physician in determining the presence of the disease in doubtful cases, which might present only a suspicious membrane or even an ordinary tonsilitis or sore throat.

In addition to this work there was procured and distributed free, upon the requisition of physicians, diphtheria antitoxin for use in all cases where the patients were unable to purchase this valuable remedy.

This antitoxin was procured at a minimum price provided for use of boards of health under the above conditions. The strength of the material so provided was the same as that sold commercially. The bulk of the dose was slightly greater, but the effect or benefit was the same.

MEETINGS OF THE BOARD.

During the year six meetings were held by the board at which consideration was given particularly to action and legislation affecting the water supplies of the State; and such actions as became necessary under the Medical Practice Act.

WORKING OF THE MEDICAL PRACTICE ACT.

Licenses Issued.—During the year fifty-nine applicants presented themselves for examination, under the Medical Practice Act, for a license to practice medicine in this State. Of this number fifty-two passed a satisfactory examination and were granted certificates. A more detailed account of these examinations is given later in this report.

Revocation of Certificate—A Portugese physician, named Jose P. F. P. M. Lobo, to whom had been granted a license to practice in this State, having received the certificate on grounds of having passed an examination with the required percentage, was accused of practicing in a manner likely to deceive and defraud the public. A hearing was granted to him to show cause why his certificate should not be revoked on the evidence presented. After hearing the evidence of the acts committed and the explanations of the defence to the charge, the board deemed it necessary to revoke his license.

LEGISLATION.

As previously mentioned, the legislature passed an amendment to Chapter 491 of the Public Laws, which deals with the protection of water supplies. The protection which the city of Woonsocket had enjoyed since 1897, under this chapter, was extended to include a number of other cities and towns of the State. The new law is given in detail later in this report.

An attempt was made to secure the passage of a bill to provide for licensing undertakers and embalmers, but although favorably re-

ported by a committee, it was later recommitted to the committee and was not again reported.

An attempt was also made to secure legislation looking to the establishment of a school for feeble-minded. A bill was introduced providing for a legislative committee to consider this subject, but was not favorably considered.

ST. LOUIS FAIR.

In compliance with a request of the Committee on Sanitary Exhibits of the Universal Exposition, held at St. Louis, the board prepared and presented a cabinet exhibit showing in condensed form the composition and scope of work of the State Board of Health of this State.

INSPECTION OF STEAMBOATS.

Following the disaster of the burning of the excursion steamboat "General Slocum" in New York waters, Governor Garvin requested the State Board of Health to thoroughly inspect and examine the several steamboats used for excursion purposes in this State as to their safety for carrying passengers and report to him.

The inspection was thoroughly made upon direction of the board, by the secretary, with the assistance of Mr. Gardner Sims, widely known as a manufactory engineer and whose experience in charge of the repair ship "Vulcan," attached to the Atlantic fleet of the United States Navy during the Spanish American War, gave him special knowledge of the equipments of steam vessels. The report, to be found in the detailed portion of this report, showed that the pleasure craft used for carrying passengers to and from the port of Providence to the many pleasure resorts on Narragansett Bay were well equipped with all the devices intended for the prevention and control of conflagration on ship board, and with equipment intended for the rescue of drowning persons and for any accidents of a minor nature.

GENERAL APPROPRIATION.

For the year 1904, there was appropriated by the General Assembly, for the general expenses of operation of the board, the same amount as in the previous year, namely \$6,000.

PERSONNEL OF THE BOARD.

The term of Rev. George L. Locke, member of the board from Bristol county, expired this year.

Governor Lucius F. C. Garvin, with the advice and consent of the senate, re-appointed Mr. Locke for a term of six years ending January 31, 1910.

EXTRACTS FROM REPORTS OF TOWN OR CITY CLERKS AND HEALTH OFFICERS.*

It has been observed, in the previous issues, that a complete annual report of a State Board of Health properly includes an account of the measures taken each year by the municipal authorities, corporations, or individuals for the promotion of the health of the communities under their respective supervision or control. In order, therefore, to ascertain the facts in relation to such measures, and for the purpose of presentation in this report as in the reports heretofore issued, and in the continuance of the design to keep well informed of all proceedings throughout the State on the part of town or city councils or any form of municipal authority in the appointments of health officers or boards of health, and in the direction of improvements which have in view and seem to promise the promotion of public health by the abatement of nuisances or the removal of unsanitary conditions and surroundings, or by the introduction of water for general use, or construction of sewers, or the establishment of other public works which may not only be of great public utility and convenience but also serve in some measure, large or small, in the prevention of disease, the secretary has, as heretofore, solicited replies from the town and city clerks of the several towns and cities or other municipal officers, in answer to questions proposed in a circular sent for that purpose.

It is designed and hoped that a connected history may thereby be secured of all sanitary improvements of a public character in all parts of the State, from year to year; and the gradual awakening of the citizens of the different towns to the necessity of sanitary public measures thereby be shown; and also whatever intelligent appre-

* Also includes extracts from other city and town officers in some cases.

ciation of such necessity, and whatever public spirit in existence in the towns there may be, may be known as manifested by the readiness with which needed sanitary measures are adopted.

The following is the form of circular sent to the town or city clerks at the close of the year 1904:

CIRCULAR No. 130.

OFFICE OF SECRETARY OF STATE BOARD OF HEALTH,

PROVIDENCE, R. I., Jan. 1, 1905.

To the Town Clerk:

It is, by statute law, made the duty of the secretary of the State Board of Health to make inquiries of town or city clerks, or of the clerks of local boards of health, in regard to the general health and sanitary condition of the towns, and also in regard to measures taken for the improvement of the same, as may be seen by the following section from the

PUBLIC STATUTES, CHAPTER 83.

SEC. 6. The secretary of the said board shall make inquiry, from time to time, of the clerks of town and local boards of health, and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill-health, and also in relation to the proceedings of the said boards of health in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals, in their several towns and localities, respectively; and the said clerks of town and local boards of health and said practicing physicians shall give such information in reply to said inquiries, of such facts and circumstances as have come to their knowledge.

In order to make complete the annual report of this board to the General Assembly the secretary would respectfully ask your co-operation by answers to the following questions:

1. Has any work for the promotion of public health been contemplated or completed in your town by the town authorities, or by private enterprise, during the year? If any, please state what.

2. If by introduction or extension of water service for general use, please

state what proportion of the population, by estimation, was supplied with the same at the end of the year.*

3. If city or town has sewage system, state the aggregate length of sewers, by estimation or otherwise, and about what proportion of the population has drainage connected with them at the end of the year.*

4. If by new ordinances in abatement of nuisances, or for any sanitary purpose, please send copy of same; also state how far, to your best knowledge, all the sanitary ordinances have been enforced. Copies of town ordinances especially desired.

5. Has your town any legal board of health beside the town council? If so, please give the names of the officers of the same.

6. Please give the names of the health officers of your town.

7. Has gratuitous vaccination been provided in your town during the past year? What proportion of the population was vaccinated, according to your best knowledge?

8. Have undertakers promptly sent in their returns of death? Please give names of any who do not. (See Public Statutes, Chap. 85, Sec.1.)

9. Do clergymen make returns of marriages promptly each month, as required by Public Statutes, Chap. 85, Sec. 4?

Thanking you in advance for your assistance, I am,

Yours truly,

GARDNER T. SWARTS,

Secretary.

N. B.—The town or other clerk should charge a remunerative fee for replying to the above circular, and present to the town council or board of health, it being a service required by law.

The following is the form of circular sent to the health officers at the end of the year 1904:

CIRCULAR No. 131.

OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH,

PROVIDENCE, January 1, 1905.

To the Health Officer:

DEAR SIR:—**An important feature** of the annual reports of the Rhode Island State Board of Health is that of giving a connected history of the occurrence of

* If not known by the person replying, please state where or of whom such information may be obtained.

contagious and epidemic diseases from year to year, as they may have prevailed in the different towns, whether epidemically or in a less degree, together with the location in the town (village or otherwise) and season of the year.

If the **proportion** of the **fatal** cases to the **whole number** of cases of the same **disease** could be given, the value of such reports would be very much enhanced. Such proportion can be ascertained only in such towns as *by town ordinance* require physicians to report all cases of such diseases as come within their charge.

An **approximate** proportion can, however, be given, after the subsidence of the disease, by inquiry of persons living in the immediate neighborhood of the prevalence of such disease, as to the number of the sick, or by house to house visitation where the sickness occurred, with the same inquiry, and by the comparison of the deaths with recoveries as so ascertained.

It is for the purpose of obtaining such information, in full or approximate, and also what may have been done to prevent and restrict diseases, that the questions in the inclosed circular (No. 132) are sent to the various health officers of the State.

To Health Officers who are not physicians, it may be said that the term **epidemic**, within the meaning of the questions proposed, is the prevalence of some disease to the extent of one or more persons affected with the disease to every five or six persons living in adjacent tenements or in the near neighborhood, or a smaller proportion, not less than one case of the disease in every ten or twelve of the population, extending over a large area of territory. One sick in every twelve to sixteen persons might be called a **large prevalence**, and one sick in every twenty to twenty-five, a **moderate prevalence**. The number of cases of any one disease may have to be estimated, but make them as nearly correct as possible.

If, therefore, you will have the kindness to reply to the questions in the said circular, according to the best knowledge you have been able to obtain, and forward in the enclosed stamped envelope, you will favor one of the most important interests in the State, and greatly oblige,

Yours truly,

GARDNER T. SWARTS,
Secretary State Board of Health.

CIRCULAR No. 132.

DEAR SIR:—Replies to the following questions, as suggested in the accompanying circular (No. 131) are respectfully solicited; said replies to be made on this circular, following each question:

1. Name of town.

2. Name of health officer.

3. Have there been, within your knowledge, any epidemics, or any large prevalence of contagious or infectious diseases, in your town during the past year? If so, of what disease or diseases? in what locality or localities? how many of each disease? * number of deaths? and in what months of the year?

Diseases.	Locality.	No. of cases.	No. of deaths.	Months in which they occurred.

4. Was isolation maintained or attempted? *

5. What proportion of the sick, if any, were isolated?

6. Was any inspection of premises made, where sickness prevailed, as to the sanitary condition of the cellars, pantries, sinks, sink-drains, water-closets, if any, cesspools, out-house privies, distance of wells from accumulations of filth, etc., etc.? If so, please give a general statement as to whether they were sanitarily in conditions good or bad, or, if any thing or place was unusually unsanitary, give a full description. Or, if the cause of any outbreak of disease was found, please state what.

7. Did you make any sanitary inspections during the past year, by order of the town council or from your own option? If so, what were they and how made?

8. Do you know of any location in your town that seems to be particularly unhealthy to any considerable number of persons? If so, and the cause is suspected, can such cause be removed at any reasonable expense?

9. Do you report to your town council nuisances dangerous to the public health, or unsanitary premises within your knowledge; or of buildings unsafe for occupants in case of fire? (See Chapter 495, Section 6, Public Laws.)

10. Has there, to your knowledge, been any contamination of any of the water, milk, or ice supplies in your town.

11. Please give names and addresses of dealers in ice in your town.

* According to the best knowledge obtainable.

In the following reports of the various town or city clerks and health officers, the replies are generally given only to those questions where there appeared to have been some changes made or some action taken on sanitary matters in the towns during the year.

The references given under No. 4 of the reports from the town clerks are to previous reports of this board.

BRISTOL COUNTY.

BARRINGTON.

REPORT OF FREDERICK P. CHURCH, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1897, p. 10.)
6. Samuel F. Bowden is the health officer.
7. Gratuitous vaccination was provided during the year. It was confined chiefly to school children.

REPORT OF SAMUEL F. BOWDEN, HEALTH OFFICER.

3. The contagious diseases for the past year were two of diphtheria, nine of scarlet fever, and one of typhoid fever. The only fatal case was one of diphtheria.
4. Isolation was stringently maintained.
5. All of the sick were isolated.
6. Inspections of premises where sickness prevailed were made, but nothing unusually unsanitary was found.
7. Three cesspools in different parts of the town were inspected during the year. They were in a very unsanitary condition and were ordered cleaned, which was done in a very thorough manner.
9. All public nuisances, unsanitary premises, etc., are reported to the town council.
11. Ebenezer Tiffany and William A. Leonard are the ice dealers of this town.

BRISTOL.

REPORT OF HERBERT F. BENNETT, TOWN CLERK.

2. About two-thirds of the population is supplied by the public water service of this town.
3. The aggregate length of sewers in this town is about ten miles, and about one-fourth of the population is connected therewith.

6. Thomas F. Head is the health officer.

7. Gratuitous vaccination to about one hundred children was provided during the year.

No report from the health officer.

WARREN.

REPORT OF CHARLES B. MASON, TOWN CLERK.

4. (Health ordinances, see report of 1899, p. 13.)

6. George L. Drown is the health officer.

7. There were twenty-eight gratuitous vaccinations during the year.

REPORT OF GEORGE L. DROWN, HEALTH OFFICER.

7. Several inspections of privies and cesspools were made during the year.

9. All public nuisances, unsanitary premises, etc., when any such come to my knowledge, are reported to the town council.

11. Ebenezer Tiffany and William A. Leonard, of Barrington, and Tanner Bros. are the ice dealers of this town.

KENT COUNTY.

COVENTRY.

REPORT OF GEORGE B. PARKER, TOWN CLERK.

2. About one-third of the population is supplied by the public water service of this town.

6. Dr. John Winsor is the health officer.

No report from the health officer.

EAST GREENWICH.

REPORT OF GEORGE A. LOOMIS, TOWN CLERK.

2. There are about five hundred water taps in town. Fully sixty-four per cent. of the population is supplied with water.

3. The aggregate length of sewers in this town is 6,335 feet. This drains one hundred and twenty-five estates, between seventy-five and eighty per cent. of which have connections made. The population of the area drained is between seven and eight hundred.

4. (Health ordinances, reports of 1894, p. 27; and 1900, p. 15.)

6. Dr. Elbridge G. Carpenter is the health officer.
7. Anyone applying to the health officer may be vaccinated gratis.

REPORT OF ELBRIDGE G. CARPENTER, M. D., HEALTH OFFICER.

3. Diphtheria was prevalent during the last three months of the year in the lower part of the town, there being about twenty-five cases of this disease, with two deaths.

4. Isolation was maintained.
5. All of the sick were isolated.
6. Inspections of premises where sickness prevailed were made, with the result of finding some unsanitary conditions.
7. Several sanitary inspections were made upon complaint during the year.
9. All public nuisances, unsanitary premises, etc., are reported to the town council.
11. E. A. Sweet is the ice dealer of this town.

WEST GREENWICH.

REPORT OF JOHN A. BATES, TOWN CLERK.

4. This town has no sanitary ordinances.
6. This town has no health officer.

WARWICK.

REPORT OF JAMES T. LOCKWOOD, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1893, p. 45.)
 6. Dr. Albert G. Sprague is the health officer.
- No report from the health officer.

NEWPORT COUNTY.

JAMESTOWN.

REPORT OF WILLIAM F. CASWELL, TOWN CLERK.

2. About two-thirds of the population of this town is supplied by the public water service.
3. A small extension of the sewers was made during the year. The aggregate length of the same is five miles, and two-thirds of the population is connected therewith.

4. No new sanitary ordinances have been enacted during the year. The present ones have not been very well enforced. (Health laws, see reports of 1893, p. 46; 1894, p. 29; 1900, p. 16.)

6. Gideon Latham is the health officer.

No report from the health officer.

LITTLE COMPTON.

REPORT OF JOHN B. TAYLOR, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1899, p. 15.)

6. Dr. John G. Hathaway is the health officer.

7. Gratuitous vaccination was provided during the year. The proportion of the population availing itself of the same was very small.

8. Undertakers have made prompt returns of deaths. When any delay has occurred it was found, upon investigation, that the fault lay principally with the physician.

No report from the health officer.

MIDDLETOWN.

REPORT OF ALBERT L. CHASE, TOWN CLERK.

2. There has been but little increase in the extension of the water service by the Newport water works. Now and then a dwelling-house is connected with the water main.

3. There is no sewage system in this town. The Newport water works has made some provision for sewage which might pollute their water supply.

4. (Contagious disease ordinances, see report of 1893, p. 48.)

6. George E. Ward is the health officer.

8. Some returns of death were delayed and others were incomplete.

9. There is some confusion in returning certificates of marriage, especially where the contracting parties are from two different towns.

REPORT OF GEORGE E. WARD, HEALTH OFFICER.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

11. There are no ice dealers in this town.

NEWPORT.

REPORT OF DAVID STEVENS, CITY CLERK.

1. An organization for the relief and prevention of tuberculosis was created during the year.

2. About sixty per cent. of the population is supplied by the public water service of this city.

3. The aggregate length of sewers in this city is over thirty miles, and fully eighty per cent. of the population is connected therewith.

5. The board of health of this city is composed of the following members: Rufus E. Darrah, M. D.; Philip E. Clark, M. D.; George D. Ramsay, M. D.; Robert Frame, and Charles E. Lawton. J. W. Sampson is the executive officer of the board and C. C. Moore, clerk.

6. Henry Gladding is the health officer, and George C. Shaw, inspector of nuisances.

REPORT OF C. C. MOORE, CLERK OF BOARD OF HEALTH.

6. Inspections of premises in all cases of diphtheria and typhoid fever were made. A large number of privy vaults were found in bad condition and were condemned.

7. General inspections are made from house to house for unsanitary conditions, by a general order of the board of health.

8. A considerable number of cases of typhoid occurred in the "Kerry Hill" district, probably due to the large number of old privy vaults and wells.

9. Public nuisances, unsanitary premises, etc., are not reported to the city council, the board of health having supervision of the same.

11. The Arctic and the Newport Ice Companies are the ice dealers of this city.

The following is extracted from the report of the board of health:—

CONTAGIOUS DISEASES.

There were no deaths from diphtheria or scarlet fever. There were four deaths from typhoid fever, and twenty-five deaths from pulmonary tuberculosis.

There has been a marked falling off in the number of cases of diphtheria, thirty-three being reported as against one hundred and twenty-nine for 1903. While the number of pulmonary tuberculosis cases reported were forty, this is not a measure of this disease. The law was not enforced until the present year, and the figures given may be taken as representing the total number of cases existing at the present time, many of which are of long standing.

BACTERIOLOGICAL WORK.

The year's experience emphasizes what was said last year in regard to this branch of our work. It has been universally successful and is now heartily received by the medical profession. There is practically no chance of secondary contagion except by violating quarantine.

FUMIGATION.

This work has been materially increased during the year by the enforcement of the ordinance in regard to pulmonary tuberculosis. Fifteen thousand three hundred (15,300) formalin pastils were used in fumigating one hundred and eighty-nine (189) rooms. The efficiency of the work is shown by there not having been a second contagion occurring in a room so treated.

WATER.

The board has caused to be made frequent analyses of the city water supplies. This work would have been carried further had not a difference arisen between this board and the State Board of Health as to the cost of analysis. The disease most to be dreaded in Newport is typhoid fever, between which and the water supply there is close intimacy.

The older sections of the city are those that are giving the most alarm in this respect, owing to the peculiar conditions existing. Twenty-six (26) wells in one district are under surveillance at the present time, with the chances that every one of them will have to be condemned. All the privy vaults have been condemned in this district, and, if it is found necessary to require the abandonment of the wells, this will entail quite a hardship upon a class of people who can ill afford, not only the expense of installation, but the rather onerous tax of twelve dollars (\$12.00) a year for the use of the water.

SWILL.

The collection of the swill has been progressing satisfactorily. A comparatively small number of complaints have been received.

Several representations, made by nearby localities, as was done last year, complained of the method of disposal of the city swill. To determine if these complaints were well founded the department secretly placed in the scow from time to time forty-eight return postal cards inclosed in sealed bottles, five of which were returned to the board. One of these was picked up eight (8) miles east of Fire Island, none from our shores; the nearest being Block Island. These cards were set adrift at different conditions of the tides and winds.

DISPOSAL OF NIGHT SOIL.

The contents of seven hundred and seventy-one (771) vaults, twenty-seven (27) cesspools, and five (5) grease traps have been disposed of in the city sewer house. This work is done by licensed carters. It was found that they were not using the city property with due care and it became necessary to charge a bill of repairs to a fund which these carters are required to keep on deposit with the board.

There has been no further trouble since then.

TUBERCULOSIS SOCIETY.

On invitation of the Board of Health, representatives of the Medical Society, Charity Organization Society and the Newport Hospital met a committee of this board in March, at which a society for the prevention of the spread of tuberculosis was formed. The movement met with general and generous support from all classes of our citizens and a splendid work has been done for the relief of those afflicted with this disease, in which the board has co-operated to the extent of its power and as far as the extent of its appropriation would permit.

NEW SEWERAGE.

In 1902 your attention was called to the necessity for a sewerage system for the Gibbs avenue district but nothing came of it at that time. This district is in imperative need of relief at your hands and this board suggests the establishment of a force main system for this district.

In a recent number of the Engineering Record a description of a system is given almost identical with the one recommended for use here. This system was installed in the city of Newton, Mass., and, while the district covered is considerably larger than the one to be treated here, the total cost of the Newton plant is given as six thousand seven hundred dollars (\$6,700.00). The cost of operation is placed at \$0.012 per thousand gallons of sewage pumped, on a total lift of thirty and seven-tenth (30.7) feet. The labor cost is not given as one of the city men employed on other work visits the pump house twice a day to start the pumps which stop automatically.

Frequent complaint has been made of Almy's pond. Conditions there are fast becoming unbearable. It is the only body of water within the city limits likely to cause trouble in the near future. Its shores are low and marshy making ideal ground for a mosquito farm. Only the houses immediately on Coggeshall Avenue can enter the Coggeshall Avenue sewer. The sewage from the other places ultimately finds its way into the pond. We emphasize the necessity of provid-

ing an intercepting main to take the sewage of those places that cannot use the sewer. This main would have to go along the low land bordering Almy's pond, discharge into a well from which the sewage could be pumped into the Coggeshall Avenue sewer. Several plans have been suggested for the improvement of Almy's pond, one of the most feasible of which is the dredging of the deeper portions of the pond, filling up of the low lands, and adding it to our park system. If such a scheme was carried out it would add greatly to the health of the city.

MILK.

During the year a great deal of pressure has been brought to bear upon the board for a more rigid enforcement of the milk law. The administration of this law by existing ordinances does not come under our jurisdiction. Since milk is the principal item of diet in the treatment of tuberculosis, and impure milk a fruitful cause of death among infants, it is of vital importance to the community that such laws as we have for safeguarding this staple should be rigidly enforced. We recommend that the milk inspector be placed under the direction of the board of health. His present salary is wholly inadequate for the work he is expected to perform, and the apparatus provided for him is meagre and antiquated.

TUBERCULOSIS.

Since the recognition of the contagious nature of tuberculosis, boards of health have become actively interested in its control. We have already spoken of the work that is being done by the tuberculosis society. While this work has been of inestimable value, and has had the warm approval of the health authorities, this organization will find sufficient use for its funds along lines which the city cannot follow. It is the city's duty to do with this disease, as it does with other contagious diseases, take control of it. Present statutes and ordinances are sufficient for this purpose. It was only lack of available funds that prevented this board taking control during the present year. We shall ask for an additional sum to carry out the following in connection with this branch of our duties: For the examination of the sputa; furnishing spit cups; the fumigation after removals, as well as after death; and for the publishing and distribution of literature bearing upon the care of the patient for the prevention of contagion.

CONTAGIOUS HOSPITAL.

In each of its annual reports the board has called attention to the need of a place for the care of contagious diseases. It is still without such means except for the treatment of small-pox. In the treatment of such cases as the board has

been compelled to assume, the means at its disposal have been not wholly satisfactory but very expensive. The case of scarlet fever which had to be cared for at the small-pox hospital cost about fifty dollars (\$50.00) per week with the most economical management.

SUMMARY.

The following is a summary of the work done by this department:

Thirty-six regular and thirteen special meetings have been held.

Monthly mortality reports have been issued each month and exchanged with other boards of health throughout the country.

One hundred and eighty-nine rooms have been fumigated.

The following bacteriological work has been done:

Two hundred and two cultures were examined; of this number seventy-eight were diagnostic cultures, thirty-two cautionary cultures, and ninety-two discharge cultures. Of the diagnostic cultures twenty-nine proved positive and forty-nine negative. Of the discharge cultures twenty-seven proved positive and sixty-five negative. Of the cautionary cultures all proved negative.

Ninety-one examinations were made for the discharge of scarlet fever cases.

NEW SHOREHAM.

REPORT OF EDWARD P. CHAMPLIN, TOWN CLERK.

4. (Nuisance ordinance, report of 1893, p. 50.)

6. Hamilton A. Mott is the health officer.

No report from the health officer.

PORTSMOUTH.

No reply from the town clerk.

(Dumping ordinance, report of 1899, p. 21.)

REPORT OF MINOT A. STEELE, HEALTH OFFICER.

7. Inspections of privies and cess-pools were made upon complaint.

9. All public nuisances, unsanitary premises, etc., when any such exist, are reported to the town council.

11. William A. Tallman is the ice dealer of this town.

TIVERTON.

REPORT OF A. LINCOLN HAMBLY, TOWN CLERK.

4. (Contagious disease ordinances, report of 1900, p. 19.)
6. Dr. Edward P. Stimson is the health officer.

REPORT OF EDWARD P. STIMSON, M. D., HEALTH OFFICER.

5. All cases of contagious or infectious diseases were quarantined.
6. Inspections of premises where sickness prevailed were made.
10. There was a case of sewage contamination in a well in the northern part of the town.
11. Isaac F. Brownell, of Tiverton, and Seabury and Peckham, of Tiverton Four Corners, are the ice dealers of this town.

PROVIDENCE COUNTY.

BURRILLVILLE.

REPORT OF EDGAR A. MATHEWSON, TOWN CLERK.

4. No general ordinances were passed during the year, but the health officer has abated many cess-pools, drains, and other nuisances during that time. (Contagious disease ordinances, see report of 1897, p. 20.)
6. James L. Bell is the health officer.
8. Undertakers have been fairly prompt in making returns of deaths.
9. Some of the clergymen are rather slow in making returns of marriages, but "get there," after a while.

REPORT OF JAMES L. BELL, HEALTH OFFICER.

4. In all cases of sporadic diphtheria or scarlet fever isolation was maintained.
6. Inspections of premises where sickness prevailed were made, but nothing more than the usual conditions were found.
7. Sanitary inspections were made during the year and in all cases where unsanitary conditions were found, they were corrected.
9. All public nuisances, unsanitary premises, etc., are reported to the town council, whenever it is found necessary.
11. The Providence Ice Company, William L. Brown, of Oakland; John M. Field, of Nasonville; Charles A. Moore, of Pascoag; and Frank W. Wood, of Harrisville; are the ice dealers of this town

CENTRAL FALLS.

REPORT OF C. FRED CRAWFORD, CITY CLERK.

1. Addition to the sewage filtration plant of this city has been made during the year. The filtering surface added was one acre.
2. The aggregate length of water mains in this city is 17.568 miles, and about 95 per cent. of the population is supplied.
3. The aggregate length of sewers in this city is 11.174 miles, and about 54 per cent. of the population is connected.
6. Dr. Adolph R. V. Fenwick is the health officer.
7. Gratuitous vaccination was provided during the year, and about $\frac{1}{80}$ of the population availed itself of the same.

REPORT OF ADOLPH R. V. FENWICK, M. D., HEALTH OFFICER.

4. Isolation was maintained.
5. All of the sick were isolated.
6. Inspections of premises where sickness prevailed were made, and in one case, where the origin was traced to a vault, the same was ordered cleaned and filled.
7. Several sanitary inspections of vaults were made and same ordered cleaned. In some cases they were ordered filled and the use thereof discontinued.
9. All public nuisances, unsanitary premises, etc., are reported to the city council.
11. G. S. Spaulding and several dealers from Pawtucket are the ice dealers of this city.

Extracts from the report of Wm. F. Keene, city engineer.

FILTER BEDS.

An appropriation of \$5,000.00 was made early in the spring to provide additional filtering surface, pipe lines, underdrains and wells. This work was commenced as soon as the money was available and several new beds were built. The land was excavated from the bank near the pest house and filled in the swamp at a cost of \$2,394.86, or 12 cents per cubic yard.

Thirty-six permits connecting thirty-eight houses were issued during the year, making a total number of 348 drains, connecting 391 houses, the sewage from which is treated by sand filtration.

The filtering area has been increased from 1.05 acres at the beginning of the year to 2.02 acres at the present time, or nearly doubled. Seven hundred feet

of underdrains have been reset and 2,900 feet of new underdrains, varying in size from 4 to 8 inches laid. Four distribution wells have been built, 175 feet of 12-inch overflow sewer and 1,420 feet of 8-inch carrier pipe lines laid.

The amount of sewage recorded during 1903 and 1904 is as follows:

Date.	No. of Gallons.	Date.	No. of Gallons.
December, 1902	1,273,100	December, 1903	1,423,000
January, 1903	1,085,900	January, 1904	1,295,000
February, 1903	1,036,000	February, 1904	1,283,000
March, 1903	1,055,100	March, 1904	1,207,000
April, 1903	1,130,500	April, 1904	1,224,000
May, 1903	1,274,500	May, 1904	1,592,000
June, 1903	957,000	June, 1904	1,607,000
July, 1903	1,424,200	July, 1904	1,962,000
August, 1903	1,213,800	August, 1904	1,941,000
September, 1903	1,377,800	September, 1904	1,982,000
October, 1903	1,245,900	October, 1904	1,830,000
November, 1903	1,302,000	November, 1904	1,762,000
<hr/>		<hr/>	
14,375,800		19,108,000	

The analyses of sewage and effluent furnished by the State Board of Health, through the chemist, Prof. Ernest F. Badger, to whom I wish to extend the appreciation the city should feel for his efficient services, show that the original beds were greatly overtaxed, and the results demonstrated ineffective purification of the sewage, but since the new beds have been in operation, each successive set of samples analyzed show marked improvement.

CRANSTON.

REPORT OF DANIEL D. WATERMAN, TOWN CLERK.

4. (Health and contagious disease ordinances, report of 1903, p. 24.)
6. Dr. D. S. Latham and the town sergeant are the health officers of this town.

REPORT OF DANIEL S. LATHAM, M. D., HEALTH OFFICER.

3. Diphtheria and scarlet fever were prevalent throughout the town; mostly during the winter months.
4. Isolation was attempted and, in a majority of cases, successfully maintained.

5. Nine out of ten of those affected were isolated.

6. Inspections of premises where sickness prevailed were made in those cases where conditions seemed to warrant it and, for the most part, sanitary conditions were good. The diseases were traced to outside infection.

7. Several nuisances were inspected at the request of private individuals; one or two inspections were made at the request of the town council. Most of the inspections were made necessary on account of neglected cess-pools and carelessness in throwing garbage into the street. In one instance it became necessary to condemn property on account of filth and unsanitary surroundings.

9. All nuisances are reported to the town council, if not abated within a reasonable time after being notified by the superintendent of health. I have never had anything to do with buildings unsafe in case of fire.

11. The Crystal Ice Company is the ice dealer of this town.

CUMBERLAND.

REPORT OF JOHN F. CLARK, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1893, p. 53.)

6. Dr. James A. Cullen is the health officer.

No report from the health officer.

EAST PROVIDENCE.

REPORT OF WILLIAM E. SMYTH, TOWN CLERK.

2. Very little extension of the public water service of this town has been made.

4. The following ordinance was enacted during the year:

TOWN OF EAST PROVIDENCE.

CHAPTER 45.

Concerning Spitting in Public Places.

It is ordained by the town council of the town of East Providence as follows:

SECTION 1. No person shall spit in any railway station, public building, steam-boat, railway car or street railway car, unless into a spittoon or other receptacle.

SEC. 2. Any person who shall violate any provision of this chapter shall be fined not exceeding twenty dollars.

SEC. 3. This ordinance shall take effect from and after its passage.

Passed October 17, 1904.

WILLIAM E. SMYTH, *Town Clerk.*

(Contagious disease ordinances, see report of 1893, p. 54.)

6. James H. Williams is the health officer.

7. Gratuitous vaccination was provided during the year.

No report from the health officer.

FOSTER.

REPORT OF GARDNER HOWARD, TOWN CLERK.

6. Dr. Henry Arnold is the health officer.

REPORT OF HENRY ARNOLD, M. D., HEALTH OFFICER.

6. Sanitary inspections where sickness prevailed were made, and sanitary conditions were found to be fairly good.

11. There are no ice dealers in this town.

GLOCESTER.

REPORT OF CHARLES W. FARNUM, TOWN CLERK.

6. Dr. George A. Harris is the health officer.

REPORT OF GEORGE A. HARRIS, M. D., HEALTH OFFICER.

6. Inspections of premises where sickness prevailed were made, but nothing unsanitary could be found.

7. One inspection, that of a drain, was made during the year.

9. There has been no occasion to report nuisances, etc., to the town council during the year.

11. Frank S. Place and Leonard Hopkins are the ice dealers of this town.

JOHNSTON.

REPORT OF STERRY K. LUTHER, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1896, p. 20.)

5. The board of health of this town is composed of Dr. Ralph H. Shaw, Hiram Kimball, and William H. Mathewson.

7. Gratuitous vaccination was provided during the year. About 1 $\frac{5.8}{100}$ per cent. of the population availed itself of the same.

REPORT OF RALPH H. SHAW, M. D., HEALTH OFFICER.

4. Isolation was maintained.
5. All possible were isolated.
6. Inspections of premises where sickness prevailed were made, and conditions found were usually unsanitary.
7. I frequently made inspections from my own option, and when complaints were made examined cess-pools and privies and ordered nuisances abated in all cases, making further inspection to see if the orders were complied with.
9. Public nuisances, etc., are not reported to the town council, as the power to enforce sanitary regulations is vested in a board of health elected by the people. This board meets monthly to discuss matters pertaining to the health of the town.
11. The Hughesdale and the Pocasset Ice Companies and W. E. Merritt are the ice dealers of this town.

LINCOLN.

REPORT OF DAVID D. JOHNSTON, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1896, p. 25.)
6. Dr. Harry A. Manchester is the health officer.

No report from the health officer.

NORTH PROVIDENCE.

REPORT OF THOMAS H. ANGELL, TOWN CLERK.

6. John Graham is the health officer.

REPORT OF JOHN T. NORTHRUP, HEALTH OFFICER.

3. There were no epidemics in this town during the year. There were nine cases of scarlet fever, none of which were fatal, reported during the months of February, March, April, and October.
4. Isolation was maintained.
5. All of the sick were isolated.
6. Inspections of premises where sickness prevailed were made, but nothing of an unsanitary nature could be found. The origin of the disease could not be determined.
7. Two inspections of a slaughter house on Charles street and one of a piggery on Wooded Road were made, but they could hardly be called a nuisance in either case.

9. All public nuisances, unsanitary premises, etc., when any such come to my knowledge, are reported to the town council.

11. Mr. Keene, of Centredale and Mr. Green, of Fruit Hill are the ice dealers of this town.

NORTH SMITHFIELD.

REPORT OF JAMES S. SLATER, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1893, p. 64.)

6. Dr. Edgar F. Hamlin is the health officer.

7. Gratuitous vaccination for pupils in the public schools was provided during the year. General gratuitous vaccination was provided several years ago and was very thorough.

REPORT OF EDGAR F. HAMLIN, M. D., HEALTH OFFICER.

3. There have been no epidemics during the year. What few contagious or infectious diseases that have been reported were scattered.

4. Isolation was maintained.

5. All of the sick were isolated.

6. All premises were inspected and, with one or two exceptions, found in fairly good condition.

7. Sanitary inspections of schoolhouses and some private cess-pools and privy vaults were made during the year.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

11. Albert Schnoir, of Slatersville; and W. R. Day, of Millville, Mass., are the ice dealers of this town.

PAWTUCKET.

REPORT OF SAMUEL H. ROBERTS, CITY CLERK.

2. Practically the entire population is supplied by the public water service of this city.

3. The aggregate length of sewers in this city is fifty miles, and about five-eighths of the population is connected therewith.

4. (Rules relative to the removal of night-soil and the contents of cess-pools and ordinance relating to registration of deaths, see report of 1898, p. 22.)

5. The board of aldermen constitute the board of health of this city.
6. Dr. Byron U. Richards is the health officer.
7. Gratuitous vaccination was provided during the year.

REPORT OF BYRON U. RICHARDS, M. D., HEALTH OFFICER.

3. This city has been very free from contagious diseases during the year.
4. Isolation was maintained.
5. All cases of diphtheria and scarlet fever were isolated.
6. Inspections of premises where sickness prevailed were frequently made. We have much surface sewage and general filth in Pawtucket, probably more than in any other part of the State.
8. In this city there are a number of unsanitary localities covered by buildings unfit for dwelling and liable to breed pestilence.
9. All public nuisances, unsanitary premises, etc., are reported to the board of aldermen. That body has many such complaints now in its possession not yet acted upon.
11. The Central Falls, Citizens, Pawtucket, Saylesville, Union, and South Attleboro Ice Companies, Telesphore Deshures, and C. H. Perry Ice Company are the ice dealers of this city.

EXTRACTS FROM THE REPORT OF WILLIAM H. BARCLAY, COMMISSIONER OF PUBLIC WORKS.

NEW PUMPING PLANT.

In the 1899 report this department pointed out the necessity of providing a new pumping plant and each successive year has urged your council to take the necessary steps to that end.

There are many reasons why this should be done, and the most important follow:

The first pumping engine was put in operation January 30, 1878, with a capacity of 3,000,000 gallons a day and four and one-half years later the second was installed, doubling the capacity. Six years after this the third engine was put in operation and the pumping facilities were again doubled, bringing the total to 12,000,000 gallons a day, the present rate. Now, after sixteen years, does it not seem proper that the pumping capacity should again be doubled by placing in operation a new 12,000,000 plant.

In the summer months the consumption of water reaches nearly 10,000,000 gallons a day.

By working the pumps twenty-four hours a day the engines can supply 12,000,000, but, on the basis of this 10,000,000 consumption, suppose something should happen to one of the plants, the 6,000,000-gallon one, for instance, our pressure would be reduced to an alarming extent, manufacturing industries would be crippled and even domestic consumers might have considerable trouble in obtaining water enough for their needs. Then there is always the possibility of a large fire to guard against and for this we need every pound of pressure and water that can be obtained. This branch of public service is self-sustaining, can issue bonds, pay the interest at the proper time out of the sinking fund provided for that purpose; all this without any additional expense to the taxpayers of the city.

In view of these facts, and also for the reason that this department desires to be relieved of any further responsibility in the matter, I recommend that immediate steps be taken toward the installation of a new 12,000,000-gallon pumping plant.

Sufficient land for this purpose is available adjoining the present No. 1 pumping station. This land is in Pawtucket, is owned by the city, and consequently would not be subject to taxation.

Such a plant would provide ample pumping facilities for many years to come, and reduce any danger of a water famine to a minimum.

The estimated cost of installing such a pumping plant, together with a building suitable for its inception, is approximately \$125,000.

I urge immediate favorable action in this matter, for the reason that nearly a year would be required for the completion of the work and for that period of time our present pumping capacity cannot be increased.

The following is extracted from the report of George A. Carpenter, city engineer:

SEWERS.

The sewer system of the city has been increased during the year by the addition of 1.387 miles of sewers, of which 0.678 miles were constructed in the Blackstone River district and 0.709 miles in the Moshassuck River section.

FILTER FIELDS.

The average number of gallons per day treated at the filter fields has been 195,914, reaching a maximum in May, when the average became 331,566 gallons per day for the month. In considering the work of the sand beds themselves, it should be noted that the total amount of sewage applied to them has been 53,300,610 gallons, an average of 146,029 gallons per day. This is an average of 43,487 gallons per acre per day for the whole year.

If the amount of sludge applied to the four sludge beds is taken from the total

amount of sewage treated during the year, it is found that the average amount of sewage applied to the regular sand beds has been 46,818 gallons per acre per day for every day in the year.

A maximum was reached in the month of June, when 5,702,780 gallons of sewage were turned on the beds, or an average of 64,064 gallons per acre per day on the regular sand beds, exclusive of the sludge beds.

The difference between the total amount of sewage treated at the filter fields, as shown by Table A, and the total amount turned on the sand beds, as reccorded in Table B, is occasioned by the fact that the sewers delivering sewage to this plant are built upon the combined system.

During the first part of the storm-flow and on occasions during the winter months, when there is a large amount of ground water and surface water from melting snow and ice in the sewers, the sewage is considerably diluted. As this flow increases in quantity to an amount that would flood the beds, if it were turned upon them, it is passed through a grit chamber and through screens to a settling tank in which the velocity is reduced and some sedimentation takes place; from thence is overflows to the river.

The amount of sewage thus partially treated is included in Table A, but not in Table B, and is the cause for the differences in the figures of the two tables.

It should be noted in this connection that the flow thus diluted and partially treated occurs during those months when the flow of the river is greatest and when the conditions for such a disposal are the most favorable. All of the dry weather flow, or the domestic sewage proper, is treated in the settling tanks and on the sand beds.

The Following Table Shows the Number of Gallons of Sewage Received and Treated at the Plant During the Year.

MONTH.	Gallons of Sewage.	Average Gallons Per Day.
October, 1903.....	4,647,680	149,925
November, 1903.....	4,549,640	151,655
December, 1903.....	4,708,041	151,872
January, 1904.....	4,947,800	159,606
February, 1904.....	7,761,371	267,633
March, 1904.....	6,676,527	215,372
April, 1904.....	9,221,891	307,396
May, 1904.....	10,278,568	331,566
June, 1904.....	5,702,780	190,093
July, 1904.....	5,184,660	167,247
August, 1904.....	4,739,730	152,894
September, 1904.....	3,089,920	102,997
Total.....	71,508,608	.....

Average number of gallons per day for the year has been 195,914.

Number of bed.	Area in acres.	Number of doses of ordi- nary sewage.	Average quantity of ordi- nary sewage applied at each dose, in gallons.	Number of doses of heavy sewage.	Average quantity of heavy sewage applied at each dose, in gallons.	Total quantity of sewage applied to beds during the year, in gallons.	Equivalent average daily quantity applied per acre, in gallons.*
1.....	.126	67.0	12,600	38	10,080	1,227,240	26,698
2.....	.132	64.6	13,200	32	10,560	1,190,640	24,712
3.....	.133	63.0	13,300	37	10,640	1,231,580	25,364
4.....	.123	59.0	12,300	33	9,840	1,050,420	23,397
5.....	.307	169.0	30,700	.....	.....	5,188,300	46,301
6.....	.211	191.48	21,100	.....	.....	3,840,200	49,637
7.....	.180	171.0	18,000	.....	.....	3,078,000	46,849
8.....	.157	178.0	15,700	.....	.....	2,794,600	48,767
9.....	.176	169.0	17,600	.....	.....	2,974,400	46,301
10.....	.178	172.0	17,800	.....	.....	3,061,600	47,123
11.....	.183	171.5	18,300	.....	.....	3,138,450	46,986
12.....	.219	178.0	21,900	.....	.....	3,898,200	48,767
13.....	.218	173.79	21,800	.....	.....	3,788,650	47,614
14.....	.329	169.0	32,900	.....	.....	5,560,100	46,301
15.....	.343	165.62	34,300	.....	.....	5,681,000	45,377
16.....	.343	166.1	34,300	.....	.....	5,697,230	45,507
Total.	3.358	.....	.....	.....	.....	53,300,610	43,487

* All beds figured on basis of 365 days.

Table Showing Amount of Sewage Let on and Amount of Sand and Sludge Removed from each Bed from December 1, 1894 to October 1, 1904.

Number of bed.	Cubic yards of poor sand removed.	Cubic yards of sludge removed.	Average depth in inches of poor sand removed.	Total number of gallons of sewage let on.	Cubic yards of poor sand removed for each 1,000,000 gallons of sewage.
1.....	157	217	91	10,141,535	15.48
2.....	156	204	81	10,252,613	15.21
3.....	150	204	81	9,891,100	15.16
4.....	138	206	81	8,950,588	15.42
5.....	308	.....	71	43,305,711	7.11
6.....	274	48	91	28,179,408	9.72
7.....	216	.....	81	28,296,554	7.63
8.....	198	.....	91	25,188,545	7.86
9.....	196	.....	81	28,017,406	6.99
10.....	238	.....	101	28,224,083	8.43
11.....	191	.....	71	29,300,421	6.52
12.....	220	.....	71	32,798,882	6.71
13.....	225	.....	101	32,115,702	7.01
14.....	40	.....	.....	6,170,500	6.48
15.....	61	.....	111	8,386,405	7.27
16.....	58	.....	111	8,762,760	6.62
14B.....	.....	.....	.....	1,706,876	.....
15B.....	.....	.....	.....	1,728,992	.....
.....	2,826	879	.....	341,417,051	.....

Beds 14B and 15B are small experimental beds discontinued April 19 1902.

The trial of the suit of the American Sewage Disposal Company of Boston against the city of Pawtucket for alleged infringement of patents covering the purification of sewage came up during the year and resulted in a verdict for the city. Considerable work was done for the attorneys in connection with the case, visiting other plants, gathering evidence for the defence, and making drawings relative to the suit.

Samples of water from Happy Hollow Pond, the source of our water supply, and from the service pipes of the distribution system have been collected monthly and forwarded to the laboratory of the State Board of Health at Providence, where analyses are made. In this way we hope to keep careful watch of a matter of vital importance to the health of the community. These regular analyses and the careful patrolling of the Abbott Run stream that is maintained by the Board of Public Works will do much to protect our water supply from dangerous pollution.

The records of the amount of precipitation of all storms that have occurred during the year have been kept at four different places; at the filter fields in the extreme southern part of the city, at the Masonic building in the center of the city, at the No. 3 pumping station at Valley Falls, and at the storage reservoir at Diamond Hill.

Average of Chemical Examinations Made by the State Board of Health October 1, 1903, to October 1, 1904.

(Parts per 100,000.)

	RESIDUE ON EVAPORATION.		AMMONIA.		NITROGEN AS	
			Albuminoid.			
	Total.	In solution.	In suspension.	Free.	Total.	In solution.
Sewage, average of 12 analyses, Oct. 7, 1903, to Nov. 16, 1903, and May 24, 1904, to Sept. 7, 1904.....	108.8	60.1	48.7	8.08	1.51	.62
Effluent from Sedimentation Tanks, average of 12 analyses, Oct. 7, 1903, to Nov. 16, 1903, and May 24, 1904, to September 7, 1904.....	71.1	52.2	18.9	8.30	.95	.60
Effluent from Sedimentation Tanks and Sand Filters, average of 16 analyses, Oct. 7, 1903, to Nov. 16, 1903, and May 24, 1904, to Sept. 7, 1904.....	49.9 A	17.0 B	32.9	1.28	.0795	.0539
Sewage, average of 11 analyses, Dec. 15, 1903, to May 11, 1904.....	101.8	52.3	49.5	7.06	1.36	.63
Effluent from Screen Tanks, average of 11 analyses, Dec. 15, 1903, to May 11, 1904.....	88.1	57.6	30.5	7.70	1.17	.76
Effluent from Screen and Sedimentation Tanks, average of 11 analyses, Dec. 15, 1903, to May 11, 1904.....	77.9	56.6	21.3	8.35	1.05	.65
Effluent from Screen and Sedimentation Tanks and Sand Filters, average of 11 analyses, Dec. 15, 1903, to May 11, 1904.....	40.2 A	14.7 B	25.5	4.37	.2230	.1870
					8.39	.0360
					1.48	.0249
					2.69	

A=Loss on ignition.

B=Fixed.

OXYGEN CONSUMED.

12.00
8.21
0.95
16.56
14.64
13.62
2.69

Purification Effected by Sedimentation Tanks and Sand Filters.

(Parts per 100,000.)

	FREE AMMONIA.			ALBUMINOID AMMONIA.			OXYGEN CONSUMED.		
	Sewage.	Effluent.	Per cent. re-moved.	Sewage.	Effluent.	Per cent. re-moved.	Sewage.	Effluent.	Per cent. re-moved.
Oct. 7, 1903, to Nov. 16, 1903; and May 24, 1904, to Sept. 7, 1904.									
Purification effected by Sedimentation Tanks.....	8.18	8.30	+1.5	1.51	0.95	37.1	12.00	8.21	31.6
Purification effected by Sedimentation Tanks and Sand Filters.	8.18	1.28	84.4	1.51	.0795	94.7	12.00	0.95	92.1

Purification Effected by Screen Tanks, Sedimentation Tanks and Sand Filters.

(Parts per 100,000.)

	FREE AMMONIA.			ALBUMINOID AMMONIA.			OXYGEN CONSUMED.		
	Sewage.	Effluent.	Per cent. re-moved.	Sewage.	Effluent.	Per cent. re-moved.	Sewage.	Effluent.	Per cent. re-moved.
Dec. 15, 1903, to May 11, 1904.									
Purification effected by Screen Tanks.....	7.06	7.70	+9.1	1.36	1.17	13.9	16.56	14.64	11.6
Purification effected by Screen Tanks and Sedimentation Tanks.	7.06	8.35	+18.3	1.36	1.05	22.8	16.56	13.64	17.6
Purification effected by Screen Tanks, Sedimentation Tanks and Sand Filters.....	7.06	4.37	38.1	1.36	.2230	83.6	16.56	2.69	83.8

PROVIDENCE.

Extract from report of city engineer, Otis F. Clapp:

The population of the city is estimated at 193,000, and the population supplied in the suburbs is estimated at 14,900. Total population supplied, 207,900.

The average daily use of water per service for the year 1904 has been 580 gallons.

The average daily use of water per capita for the year 1904 has been 67 gallons.

The water receipts for 1904 were \$670,700.90.

The net cost of maintenance for 1904 was \$167,753.70.

The net cost of the water works construction from November 8, 1869, to January 1, 1905, is \$6,638,894.92, upon which there has been a revenue for water sold of \$11,909,058.03.

The monthly and annual and the average daily and monthly consumption of water in gallons, including waste and leakage, during the year, is shown by the following table:

MONTHS.	Consumption per month.	Average monthly consumption.	Average daily consumption. per month.	Average daily consumption for the year.
January.....	442,995,758	.....	14,290,186	.....
February.....	422,842,543	.....	14,580,777	.....
March.....	416,043,371	.....	13,420,754	.....
April.....	362,046,312	.....	12,068,210	.....
May.....	394,317,662	.....	12,719,925	.....
June.....	418,293,672	.....	13,943,122	.....
July.....	440,492,136	.....	14,209,424	.....
August.....	408,594,463	.....	13,180,467	.....
September.....	415,599,228	.....	13,853,308	.....
October.....	451,557,418	.....	14,566,368	.....
November.....	446,258,787	.....	14,875,293	.....
December.....	452,652,341	.....	14,601,688	.....
Total.....	5,071,693,691	422,641,141	.....	13,857,087

The maximum consumption of water for any one day during the year 1904 was 19,172,000 gallons.

At the filtration plant the six beds are completed, the gravel is in place in four of them, the sand is in place in three and partly in the fourth bed. The contractors spent the whole of the previous season trying to get out sand answering the specification, but without success. During the early part of last summer a process was developed by which the desired result was obtained and the work progressed from that time with considerable speed. The pumps and motors in the filtration pumping station are ready to start, as are also the steam turbines in the water works pumping station.

The investigations in relation to electrolysis have been continued. A partial survey was made by Mr. Knudson in May. Conditions were, on the whole, somewhat better than on previous surveys. The traction company has done considerable in the way of providing for better returns to their power station. Trouble continues to exist along the water front with pipes and meters exposed to dampness from salt water. Voltmeter readings are taken occasionally at questionable points and also at stations established for the purpose. The insert represents two continuous twenty-four hour readings at our station in the basement of the city hall.

WATER WORKS STATISTICS FOR THE YEAR 1904.

IN ACCORDANCE WITH FORM ADOPTED BY THE NEW ENGLAND WATER WORKS ASSOCIATION.

Providence Water Works, Providence County, R. I.

Population of Providence	193,000
Estimated population supplied in suburbs,	14,900
Date of construction,	1870 to 1876.
By whom owned	City of Providence.
Source of supply,	Pawtuxet river, in the Town of Cranston.
Mode of supply,	

The water is pumped from the Pawtuxet river into a storage reservoir located upon a hill about one mile distant. From this reservoir it flows into the city by gravitation, directly supplying a second storage reservoir within the city limits, and also that portion of the city which is of sufficiently low elevation to be served by gravitation. To supply that part of the city of too high an elevation to be served by these reservoirs, a third reservoir is located in the town of North Providence. The water is pumped by supplementary pumping machinery from the second reservoir above mentioned or from the mains, into the high service reservoir. This supplementary pumping machinery can also supply the high service district, if the reservoir should be out of service, by pumping directly into the mains.

In addition to the regular distribution pipes there is an independent high pressure fire system (deriving its supply from the high service), for protecting an area of about one-half of one square mile in the centre of the business portion of the city.

PUMPING.

1. Builders of pumping machinery,
 - a. Worthington Duplex engine, built by Henry R. Worthington. (Out of service.)

- b.* Cornish engine, built by Paulding, Kemble & Co.
c. Corliss Vertical engine, built by George H. Corliss.
d. Worthington Triple Expansion engine, built by Henry R. Worthington.
e. Nagle High Service engine, built by the Providence Steam Engine Co.
f. Holly High Service engine, built by the Holly Manufacturing Co.

Worthington	Corliss.	Holly	Cornish.
Triple		High	
Expansion.		Service.	

2. Description of coal used,

<i>a.</i> Bituminous.	Bituminous.	Anthracite No. 2 and 3 buckwheat.	Bituminous.
<i>b.</i> George's Creek Cumberland, Pocahantas and New River.	George's Creek Cumberland and New River.	Wyoming, etc.	New River.
<i>c.</i> Price, per gross ton delivered			
\$4.72	\$4.57	\$2.75	\$4.26
<i>d.</i> Percentage of ash,			
11.3	13.5	21.1	9.1
<i>e.</i> Wood, price per cord,			
\$4.50	\$4.50	\$4.09	\$4.50

3. Coal consumed for the year, in pounds,

*7,015,400	†1,792,800	1,189,590	1,117,500
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4. [Pounds of wood consumed] ÷ 3 = equivalent amount of coal in pounds,

667	5,000	2,484	417
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5. Total equivalent coal consumed for the year, (3) + (4) in pounds,

*7,016,067	†1,797,800	1,192,074	1,117,917
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6. Total pumpage for the year in gallons, with allowance for slip,

3,576,092,908	1,206,472,894	556,620,531	361,793,205
Worthington.	Corliss.	Holly.	Cornish.

7. Average static head against which pumps work, in feet,

171.04	170.71	115.26	167.28
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8. Average dynamic head against which pumps work, in feet,

177.10	177.94	129.53	176.98
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* Including 103,100 pounds for heating.

† Not including 6,600 pounds when engine was not in service.

9.	Number of gallons pumped per pound of equivalent coal (5),			
	510	671	467	324
10.	Duty = $\frac{\text{Gallons pumped (6)} \times 8.34 \text{ (lbs.)} \times 100 \times \text{dynamic head (8)}}{\text{Total fuel consumed (5)}}$,			
	75,283,478	99,590,022	50,442,014	47,768,143

COST OF PUMPING, FIGURED ON PUMPING STATION EXPENSES, VIZ.: \$36,220.89 FOR THE LOW SERVICE, INCLUDING \$1,495.00 FOR REPAIRS ON WORTHINGTON ENGINE, AND \$5,200.19 FOR THE HIGH SERVICE.

11.	a.	Per million gallons pumped into low service reservoir, the cost was.....	\$7 04
	b.	Into high service reservoir (pumped twice \$7.04 + \$9.34).....	\$16.38
12.		Per million gallons raised one foot high (dynamic), low service, the cost was.....	\$0.0397
		High Service (pumped twice, \$0.0397 + \$0.0721), the cost was.....	\$0.1118
O.		Net cost of works to date.....	\$6,638,894 92
P.		Bonded debt at date.....	\$5,674,000 00
Q.		Value of Sinking Fund at date.....	\$1,400,326.60
R.		Average rate of interest.....	\$0.0385 +

CONSUMPTION.

1.	Estimated total population of district at date.....	207,900
2.	{ Estimated population on lines of pipe, } { Esitimated population supplied, }	{ Number not taking city water so small that total population is used.
3.		
4.	Total number of gallons consumed for year.....	5,071,693,691
5.	{ Passed through meters, } { Percentage of consumption metered, }	{ Estimated about 60 per cent.
6.		
7.	Average daily consumption in gallons.....	13,857,087
8.	Gallons per day to each inhabitant.....	67
10.	Gallons per day to each tap (distribution 22).....	580

DISTRIBUTION.—MAINS.*

1.	Kind of pipes used.....	Cast iron.
2.	Sizes.....	From 6 to 36 inches
3.	Extended.....	22,766.74 feet.

* Not including high pressure fire service.

4.	Discontinued.....	2,291.02 feet.
5.	Total now in use,*.....	345.7105 miles
7.	Number of leaks for year, 18; 11 of which were joints, 4 cracked pipe (2 of which were frozen), 1 electrolysis, 1 cold-shut, 1 bell cap knocked off by conduit workmen, repairs costing.....	\$250.60
8.	Small distribution pipes, less than four inches, total length.	None.
9.	Fire hydrants added,†.....	42
10.	Number of hydrants now in use(†) (a) fire.....	2,031
	(b) watering cart hydrants or street sprinklers.....	64
	(c) car sprinkler hydrants.....	21
11.	Stop gates added.....	68
12.	Number now in use.....	3,674
13.	Stop gates less than four inches.....	None.
14.	Number of blow-off gates.....	32
15.	Range of pressure on mains at centre of city for day and night.....	64 to 73 lbs.

HIGH PRESSURE FIRE SERVICE.

Kind of pipes used.....	Cast iron.
Size.....	12, 16, and 24-inch.
Extended.....	108.88 feet.
Total now in use.....	5.5905 miles.
Hydrants added.....	None.
Number now in use.....	92
Stop gates now in use.....	31
Number of blow-off gates.....	4
Pressure on mains at centre of business portion of city, for day and night.....	114 lbs.

SERVICES.

16.	Kind of pipe.....	Lead from $\frac{1}{2}$ to $1\frac{1}{4}$ inches, and cast iron
17.	Sizes.....	From $\frac{1}{2}$ to 10 inches
21.	Services added.....	587
22.	Number now in use.....	23,881

* Includes 10,084 feet of 36-inch pipe, 561 feet of 30-inch pipe, and 695 feet of 24-inch pipe, which are force mains, and 19.66 feet of 30-inch pipe, and 19,478.46 feet of 24-inch pipe, which are used both as a force and delivery main.

† Not including high pressure fire service, or private hydrants.

25. Meters added.....	688
26. Number now in use.....	20,489
27. Percentage of services metered.....	86
29. Elevator supplies added.....	5
30. Number now in use, 161 of 4 and 6-inch, and 20 smaller supplies connected to house elevators.	

REMARKS.

The Cornish engine was run on 57 days.

The Worthington Duplex engine was not run during the year. (Out of service.)

The Corliss Vertical engine was run on 233 days.

The Worthington Triple Expansion engine was run on 305 days.

The Nagle engine was not run during the year.

The Holly engine was run on 298 days.

The work relating to this department has been in charge of Irving S. Wood, Assistant Engineer.

SEWERS.

From the preceding tables it will be seen that 4.158 miles of regular sewers have been built during the year 1904, of which 3.198 miles were of pipe, and 0.960 miles were of brick, making the total length to date, 132.764 miles of pipe, and 39.296 miles of brick sewer.

In addition to the regular sewers, 0.012 miles of sewers have been added to the improved sewerage system, making a total of 4.170 miles of sewers built during the past year, and a total of 200.448 miles of sewers in the sewerage system.

Total length of storm sewers to date, 9.38 miles.

The matter of building a sewer in Kinsley avenue, from Harris avenue to Eagle street, referred to in the Mayor's message, should be attended to, as the main source of pollution of the Woonasquatucket river is now in the triangle bounded by Atwells avenue, Eagle and Valley streets. There is also an area west of Harris avenue, fronting on Atwells avenue, that cannot be sewered until this line is built, and one petition for sewer in Atwells avenue is now held back for that reason. This sewer when built should be extended west from Eagle street along the river bed, or otherwise to Atwells avenue near the bridge, to give drainage to the area just mentioned.

SUMMARY OF PURIFICATION STATISTICS.

CHEMICAL PRECIPITATION.

1. Population in 1904, 193,000.
2. Population served by sewers, about 175,000 (estimated).
3. Length of sewerage system in miles: Combined, 200.448; storm sewers, 9.33.
4. Character of sewage: Manufacturing, wool washings, jewelers', dyeing and bleaching wastes, with domestic sewage.
5. Strength of average sewage (parts per 100,000): Albuminoid ammonia, total 0.788; suspended, 0.415; chlorine, 60.15.
6. Daily flow of sewage in million gallons: Maximum, March 12th, 59.948; minimum, July 4th, 10.221; average for the year, 20.897.
7. Average daily flow of sewage treated: 20,000,000 gallons.
8. Pounds of lime used per million gallons of sewage: 683.
9. Other chemicals used: Copperas, 58 pounds per million gallons.
10. Cubic contents of settling basins up to water surface, when in use, in million gallons: 11.13.
11. Per cent. organic matter removed from sewage in terms of albuminoid ammonia: total, 49.37; suspended, 82.66.
12. Disposition of effluent: Discharged into Providence river off the end of Field's Point under 36 feet of water.
13. Volume of sludge produced in gallons per million gallons of sewage treated: 4,003.
14. Per cent. of solids in wet sludge: 7.54.
15. Method of sludge disposal: Pressed and cake hauled by steam train to dump one-eighth of a mile away.
16. Cost of treatment per million gallons of sewage: Chemical precipitation, \$3.42; sludge disposal, \$2.57.

SLUDGE PRESSING.

1. Average number of gallons pumped per day, 79,388.
2. Per cent. of solids in wet sludge: 7.54.
3. Pounds of lime added per thousand gallons of sludge: 22.2.
4. Description of machinery used: Sludge pumped by Shone ejectors (2-500 gall.) to storage reservoirs; thence by gravity to forcing receivers (4-8 ft. dia. x 12 ft.); thence forced under 60-80 lbs. pressure per square inch up into the presses. The ejectors and forcing receivers are run by air pressure generated by one 150 and one 50 h. p. air compressors actuated by electric motors; 16 filter presses are used, each with from 43 to 54 plates, with six-inch centre holes, forming cakes

36 inches square and from $1\frac{1}{4}$ inch to $\frac{3}{4}$ inch thick, between filter cloths which surround the plates.

5. Hours of operation of presses daily: 6.06.
6. For light, heat and power, \$7.73 per day.
7. Tons of sludge cake produced daily: 84.4
8. Per cent. of solids in cake: 29.55.
9. Tons of solids in sludge cake produced daily: 24.94.
10. Cost of operation per ton of solids: \$2.06.

Quantities per day in above table calculated on basis of 366 day's work.

The work relating to this department has been in charge of John E. Bowen, assistant engineer.

REPORT OF DR. CHARLES V. CHAPIN, SUPERINTENDENT OF HEALTH.

(Charles V. Chapin, M. D., superintendent of health; Eugene P. King, M. D., medical inspector; Charles H. Leonard, M. D., vaccinating physician).

The following extracts from Dr. Chapin's report fully answer all the questions in circular No. 132:

GARBAGE.

During the year the "swill and house offal" was collected by Messrs. A. H. and J. Barney under a temporary arrangement at the rate of 15 1-2 cents per capita. The amount paid has been \$2,299.17 per month, the population being estimated at the time the agreement was made at 178,000. This makes the annual payments \$27,590.04. The contractors use twenty-two two-horse wagons, and it is estimated that about 16,000 tons of garbage are collected annually.

During the year 538 complaints were received from householders in regard to removal of their swill, or in regard to articles supposed to be lost in it. Most of these complaints were due to failure to report return home after absence, or to the putting of ashes or other improper material in the swill. A telephone has been placed in the foreman's office so that complaints may receive prompt attention at all hours.

A small amount of garbage is collected by farmers who receive a special license for this. There are also a considerable number of farmers who purchase swill from the contractors and draw it out into the country to feed to swine. Each person is required to have a license for this. In all seventy-seven of these licenses were issued during 1904. These licenses run from April 1st to April 1st.

A great deal of trouble has been caused by these "outside" collectors. It has been very difficult to look after their wagons, which have often been dirty, uncovered and leaky. It was therefore determined this year to require steel wagons such as the contractor has used almost exclusively for many years. The licensees

as a rule used running gear and had steel boxes made with wooden covers. The requirements were that the sides should be of No. 12 steel, the bottom of the same, if it was to rest on a wooden bottom, or, if not, of $\frac{1}{4}$ inch steel. The top and bottom were to be strengthened on the outside with $1\frac{1}{2}$ inch angle iron, $\frac{1}{4}$ inch thick. All rivets to be $1\frac{1}{2}$ inches apart. The box was to be watertight. These boxes cost, according to size, from \$40 to \$60. It was thought that these requirements would cause many of these men to give up their business, but this result was less marked than was expected. Seventy-seven licenses were issued, which was only 30 less than in 1903. The results of this regulation have been very gratifying, as there has been no trouble at all from leaky or otherwise defective wagons.

A short history of garbage collection and disposal was given in my report for 1902.

BOARDING HOUSES FOR INFANTS.

These boarding houses are required to take out licenses annually by Chapter 464 of the Public Laws (May 20, 1897). They must also be inspected annually by this department. Fourteen licenses were issued in 1904 authorizing the receiving of fifty-six children. The largest number in any one house was twelve.

There are no baby farms in the city in the ordinary acceptance of the term, that is, there are no places where large numbers of children are kept together under poor surroundings and with neglect of all sanitary precautions.

MEDICAL INSPECTION OF SCHOOLS.

On April 7, 1904, the board of aldermen passed a resolution authorizing the superintendent of health to provide medical inspection of schools, and, on June 2nd, this resolution was amended to read as follows:

"RESOLVED, That the Superintendent of Health is hereby authorized to expend not exceeding one thousand (\$1,000) dollars for salaries of Inspectors, and not exceeding one hundred (\$100) dollars for other expenses in any one fiscal year for the medical inspection of public schools, said expense to be charged to the annual appropriation for the Health Department."

Under these resolutions I appointed as inspectors Drs. Charles E. Hawkes and Ellen A. Stone. The appointment of a woman has proved eminently satisfactory and both inspectors have done most excellent work, and have taken the greatest interest in it. They began their inspections on April 21st and 25th, respectively,

With the small sum to be used for the purpose, and with only two inspectors, it was evident that the methods employed in Boston, New York, and other cities, could not be adopted here. Daily visits to each school were out of the question. The medical inspection of schools was introduced primarily for the purpose of

preventing the spread of the more important contagious diseases, such as scarlet fever, diphtheria, and measles. Of course such cases should be removed from school at the earliest possible moment, and to find and isolate them, daily inspection is necessary. But the experience of all cities has shown that comparatively few cases of these diseases are discovered, and that the chief work of the inspectors is with skin diseases, parasites, trachoma, defects of vision and hearing, adenoids, nervous affections, and mental defects. Such being the case,—it is evident that daily inspection is not so necessary as was at first supposed. Most of the cases needing medical advice may wait a while without doing any great harm to themselves or others. The inspection in this city was undertaken chiefly to meet the demands of teachers. Teachers were continually sending children to the city hall for examination, to learn whether they had some contagious skin affection, or to have a diagnosis of some throat, nose, or eye trouble, and I was not infrequently called upon to visit schools, for the same purpose. So great was the desire for medical advice that the teachers in one grammar school made private arrangements with a physician for daily inspection. Of course it is impossible with only two inspectors to have a daily inspection. In fact it has been found impossible for them to visit each school oftener than about once in two months. The plan of work followed can perhaps best be described by the following extracts from a circular of information issued to teachers:

“FIRST. There comes to the knowledge of teachers a large number of children, who have some suspicious skin disease, sores, ulcers, discharges from the ears, difficulty with the eyes, etc. Many of these can be sent to the City Hall for examination. One of the inspectors will be at the Health Department in the City Hall every school day from 12 to 1 o'clock. All children that are to be examined and are able to come to the City Hall should be sent there at that hour. When sending such children give them one of the enclosed *Note to School Inspectors* slips, and fill the blank spaces as indicated and put it in one of the envelopes directed to this department.

“SECOND. When cases suspected to be diphtheria, scarlet fever or other serious diseases are discovered in school they should of course at once be sent home and a notification sent to the Health Department on one of the cards used for reporting contagious disease. (The name of the school should be written on the card in place of the physician's name.) If it is rumored that children are at home sick with these diseases, such cases also should be reported to the Health Department. The Inspector will be sent each morning at 9 o'clock to visit such cases at their homes.

“THIRD. While it will of course greatly economize the work of the Inspectors to have as many as possible of the cases requiring inspection sent to the City Hall,

there will be occasions when it is impossible to do this because the child is too young to go alone, or because the parents will not be interested enough to take it, or for other reasons. Such a child may be sent home and the case reported to the Health Department, or, if it is thought that no harm would be done by its continuing in school for a day or two, a request may be sent in, that the inspector call at the school. When, as sometimes happens, there are several suspicious cases in a school, a visit to the school should be requested. If there is any matter relating to the health of the school which can best be investigated or talked over at the school, the inspector will call on request. Such requests also should be sent to the Health Department on the cards used for reporting contagious disease.

"FOURTH. It is intended that the inspectors shall visit the schools in routine to confer with teachers, learn what they can in regard to the sanitary conditions and offer such suggestions as may be.

The chief difficulty experienced in this school inspection is in securing treatment for the children. For the minor contagious skin diseases and pediculosis, treatment by the inspectors seems to be necessary, and this has been the experience of other cities. But for such affections as adenoids, defects of vision, middle ear inflammations, or other similar conditions, it is difficult to get the parents to consult a physician. Many parents earning fair wages refuse to pay for treatment even when the need for it is urgent and evident. Of course such cases are refused at the hospitals and dispensaries, and hence in such cases the inspection comes to naught. Then again parents will consult opticians or unreliable oculists because they are low priced, and the result is that the child is not benefited and the inspection is discredited in the minds of parents. Many conditions besides defects of vision require expert treatment, which parents often fail to secure, yet of course any attempt on the part of inspectors to offer advice as to whom to consult would be manifestly improper. Then again mistakes in diagnosis on the part of the inspectors must be occasionally expected, as no one person can be an expert in every branch of medical practice, and even experts have been known to err. It is readily seen that such errors may be the cause of decided friction between parents, family physician and school inspector. Yet, on the whole, the inspection has worked decidedly well, with very little friction, and I think the good accomplished has amply justified the expense. The experiment has met with the hearty approval of the school department, and the superintendent and teachers have done everything possible to assist.

The agency of the public schools in the transmission of scarlet fever and diphtheria was considered in the report for 1903, p. 112, *et seq.* During 1904 no outbreak of either disease could be traced to school infection. There was for quite

a period a considerable number of cases of diphtheria in and about the Hendrick Street school, but, as in many such cases, it appeared to be neighborhood infection rather than school infection.

It is the custom in this department not to exclude from school, children in the house, except those of the family in which the disease actually exists. If, however, it is believed that there will be no isolation, and there will possibly be a mingling of all the children in the house, they are all excluded. This, however, is not done in more than a quarter of the cases.

In diphtheria, children in the non-infected families are not generally allowed to go to school until a negative culture has been obtained from the throat. Of the fifty children, who were thus examined in 1904, three showed the presence of diphtheria bacilli, and were therefore not given permits. During 1904, permits were given to forty-seven children living in twenty-seven "infected houses," but not in infected families, to attend school. During the past nine years the figures are five hundred and fourteen children in two hundred and six families. In none of these did the disease develop, which indicates that it is quite safe to permit children in the infected house, but not in the infected family, to attend school, except in those cases where manifestly no care is taken.

In scarlet fever, children in the non-infected families are in most instances allowed to attend school. If they have had the disease previously they are given their permits at once, but if they have not had the disease they are usually kept out of school for a week. During 1904, permits were given to one hundred and twenty-eight susceptible children in seventy-eight families. During the past nine years the figures are four hundred thirty-eight children in two hundred sixty-six families. Previous to 1904 none of the children who received permits developed scarlet fever, but in that year there were five cases in two families. Besides these five cases, one child developed the disease nine days after disinfection and forty-two days after the commencement of the disease in the first family. In another instance, permits were given to three children, who had just recovered from the initial symptoms of scarlet fever and had not begun to desquamate. The parents, who seemed reliable people, had lied about the facts.

DISINFECTION.

Disinfection after communicable disease in the city is not compulsory, and is only done at the request of the family. It is done by this department without charge.

The question of the recurrence of the disease after disinfection is an important one and was discussed in the report for 1903, pages 13 to 17. (Reference to recurrent cases in 1904, follow).

VACCINATION.

During the year 1904 the number of persons vaccinated was 1,895. The only public vaccination has been at the Fourth Ward Room on Fountain Street Friday afternoons. The use of humanized virus which had hitherto been chiefly employed, was discontinued early in 1901 and glycerinized virus furnished by the health department of the city of New York has since been used. The number of certificates of vaccination issued was 2,543.

QUARANTINE.

The custom at this port is for the signal officer to hail all vessels arriving from a foreign port and ascertain whether they have a clean bill of health, and whether there is, or has been, any sickness on board. If there is sickness on board, or if they have not a clean bill of health, or if they come from any port outside of British North America, they are brought to anchor, and inspected by a physician from this department. In 1904, forty-four vessels were hailed by the signal officer.

CONTAGIOUS DISEASE HOSPITAL.

In 1891 the Rhode Island Hospital began to receive a few scarlet fever and diphtheria patients in the "Russell Ward." In 1896 the city built a ward on the hospital grounds for the care of such patients as should be sent there by this department. The ward is maintained by the Rhode Island Hospital, and the city pays \$15 per week for every patient sent to the hospital by this department. During the year there were removed to the hospital under my direction 222 cases, and the total expense to the city for caring for them was \$12,616.72. Table IX shows the number of cases admitted since the hospital was opened, and also the number of deaths that occurred in the hospital, and the amount paid for the care of patients. This table only includes patients from Providence. It does not include cases which were brought in from outside the city or cases which were developed in the hospital. These are referred to below. Before 1903 there might have been a very few cases of mixed infection admitted, but they were very few, if any, and were doubtless tabulated as either scarlet fever or diphtheria. Occasionally cases are sent to the hospital as scarlet fever, diphtheria, or measles, but which do not prove to be such, and are, after a few days, discharged. These cases have not been noted in previous reports but will be hereafter. In this table a case means a person, while in other parts of this report a case refers to the disease, and we may have two cases, one of scarlet fever and one of diphtheria, in the same person.

It is of interest and value to know the time during which the patients remain

in the hospital. This is important for the study of the duration of the infectious period, or the occurrence of "return cases." It is also of interest when considering the cost of maintenance of the hospital. The following table shows the stay in the hospital of the scarlet fever and diphtheria cases in 1903 and 1904. This list does not include the cases of mixed infection, the cases which originated in the hospital, or the cases which originated out of the city.

Owing to the severe outbreak of scarlet fever which began in the autumn of 1903 and continued until the summer of 1904, and the rather more than average prevalence and severity of diphtheria, very great demand was made upon the hospital. The hospital has been gaining in popularity ever since it was opened, and as a result it became crowded early in the autumn of 1903, so that from that time until April, 1904, it was often necessary to refuse admission to patients, resulting in numerous instances in very great hardship. The crowded condition of the wards, and the admission of cases of mixed infection, made it impossible to maintain proper isolation, and was the cause of the development of so many cases of scarlet fever and diphtheria in the hospital in 1903 and 1904. Not only was there insufficient accommodation in the contagious wards for the patients who should have been sent there, but this department did not have sufficient money to pay for them. By the first of April, payments to the Rhode Island Hospital for the care of contagious diseases had consumed so much of the appropriation for this department, that it was necessary for me early in that month to inform the physicians of the city, and the public, that no more cases of contagious disease could be provided for at the hospital. Previous to 1904 the largest annual sum paid for hospital treatment was \$6,943.61, and the estimate for the fiscal year ending Sept. 30, 1904, was \$10,000, which seemed a fair allowance. But for the reasons stated above, \$10,537.55 were expended during during the first half of the fiscal year. On April 6, I sent a communication to the board of aldermen setting forth in some detail the conditions above referred to, and asked that immediate action be taken to provide additional hospital facilities, and sufficient funds to care for the patients who ought to be admitted. On May 3d a joint special committee of the city council was appointed to consider the whole subject and they at once conferred with the hospital authorities. On May 31 a communication was sent from the Trustees of the Rhode Island Hospital, stating that after careful consideration, they had decided that the best interests of the hospital demanded that that institution be relieved of the care of contagious diseases, and on June 13th they notified the committee that after Oct. 1, 1906, they would not be able to receive such cases. Your committee reported on July 7th, recommending that a special committee be appointed "to submit plans and estimates of the cost of establishing a city hospital for the treat-

ment of contagious diseases." Finally, on Sept. 16, 1904, a joint resolution was approved appointing a committee "to inquire into and report to the city council upon the advisability of establishing in some suitable location, or on land owned by the city of Providence, a City Hospital for the treatment of contagious diseases." This committee was appointed and is now considering the subject.

One object in removing to the hospital persons sick with scarlet fever or diphtheria is to protect those who remain at home. How much protection is secured in this way was discussed in my report for 1903, pages 23 to 29.

In 1904 scarlet fever patients were removed to the hospital from forty-three families in which remained one hundred sixty-seven susceptible persons, of whom ninety-four were under twenty-one years of age. Of those left behind, four were attacked on the fourth, fifth, eighth, and twelfth day after removal. The ages of those attacked were, adult, two years, four years, and one year, respectively. The four cases were at the rate of one in 44.2 persons exposed. If removal to the hospital had not taken place, a rate of attack of one in eight might have been expected, or about twenty persons instead of the four who actually were attacked, or, taking into account the children only, the number attacked was three, or one in thirty-one, while the number to be expected if there had been no removal to the hospital, was about one in 6.5, or fourteen children instead of the three who actually were attacked.

In diphtheria, patients were removed to the hospital from eighty-four families, in which there remained three hundred seventy-four persons, of whom one hundred seventy-four were children. Of those left behind, twelve were attacked, two on the day of removal, five on the second day, two on the third, and one each on the fifth, sixth, and sixteenth day. These twelve cases were at the rate of one in 31.1 persons exposed. If removal to the hospital had not taken place, a rate of attack of about one in 12.8 might have been expected, or about thirty-one persons instead of twelve who actually were attacked, or, taking into account merely the persons under twenty-one years of age, the number attacked was eleven, while the number to be expected if there had been no removal to the hospital would have been one in about 7.7, or about twenty-two. Besides the above, there were eight instances in which diphtheria bacilli were found in well members of the family after the removal of the patient to the hospital.

In the preceding paragraphs "return cases" have not been taken into account. By return cases is usually meant those cases which develop in a family after the return of a patient who has been removed to the hospital, and which are presumably due to the return. The consideration of these cases is important as throwing light on the duration of infectivity.

MEASLES.

Physicians are now required to report this disease, but comparatively few cases are reported, due chiefly to the fact that in measles the doctor is rarely called.

TUBERCULOSIS.

During the year thirty-seven cases of consumption were reported by the physicians of the city, and fifty-one from the outpatient department of the Rhode Island Hospital. As there were three hundred forty-two deaths, it is evident that the rule requiring the report of this disease was very generally violated. There were reported from the state board of health one hundred forty-six positive results of sputum examination. In all, therefore, two hundred thirty-six living cases of tuberculosis came to the notice of this department during the year. All of these were pulmonary. It was intended that every case of tuberculosis reported to this department should be visited by an inspector, data in regard to its history collected, and directions given in regard to the care of sputum, etc. It was not, however, deemed advisable to do this without the consent of the attending physician. Of the two hundred thirty-six cases reported during the year, only one hundred and one were visited by the inspector, for in one hundred thirty-five cases the attending physician requested that no inspection should be made. In only fifty-two cases were satisfactory data obtained in regard to the history of the case. It was my intention among other things to shown statistically the danger of the spread of this disease in the family. It was intended to distinguish between blood relations of the patient and others living in the same household, but the data were not exact enough for that. The following are the facts as obtained:

YEAR.	Number of families with only one case.	Number of additional persons in these families.	Number of families with more than one case.	Number of additional persons in these families.	Number of these persons attacked.
1903.....	34	.....	25	110	38
1904.....	39	211	13	80	18

As indicated in my last report, I do not think much of post mortem disinfection in this disease, and have made no effort to have it done by this department. Nevertheless, it has been requested by the physician or family in twenty-nine instances, and done by this department. In 1903 the number disinfected was thirty-four.

In the report for 1903, page 53, was printed a diagram showing the seasonal distribution of typhoid fever by weeks for a number of years.

Of the typhoid fever reported in the city during the year 1904, seventeen cases, of which four died, were probably contracted outside of the city.

In five instances there were two cases in the same house, and it is probable that the secondary cases were in each instance due to infection from the first case. There are always cases of direct infection from person to person, but there were fewer this year than usual.

The State Board of Health offers to examine the blood of typhoid suspects by the Widal test, but of the one hundred six cases reported during the year only thirty-two were subjected to the test, twenty-nine of which proved to be positive. There were also eighty-three other negative tests reported to this department by the State Board of Health from cases not reckoned as typhoid.

It has recently been learned that typhoid fever is sometimes transmitted by oysters, and sometimes by celery, lettuce, etc. The source of the typhoid that occurs in this city is usually unknown; during the last few years an effort has been made to see if any of it could be traced to the sources above referred to. But no evidence pointing to this has been obtained. Of forty-nine of the patients in 1904, who replied definitely as to whether they had eaten of celery, lettuce, or other raw vegetables within two or three weeks of their attack, forty-three replied in the negative, and six in the affirmative, but in no case could any clue be found to a possible infection. Of forty-eight patients, six confessed to eating raw oysters, while forty-two said they had not. In nine cases the patients said they had eaten raw fruit and in twenty-eight instances claimed that they had not.

DIPHTHERIA.

Besides the cases which were recorded as diphtheria, there were eight cases of membranous croup and eight of other forms of laryngeal affection, which came to the knowledge of this department in 1904. All of these, except four of the membranous croup cases, resulted in death. It is probable that most of these cases were really diphtheria, and if reckoned would considerably increase the mortality from that disease. All of the cases of membranous croup were placarded with a membranous croup sign and were treated as if contagious. In none of these cases were any cultures taken.

There were reckoned as diphtheria two hundred and five cases, in one hundred thirty-eight families, in none of which diphtheria bacilli were found. Some of these were doubtless not diphtheria but the attending physician reported them as diphtheria and in one hundred ninety-five of the cases no culture was taken for diagnosis. In the other ten cases cultures were taken which proved to be negative.

In seven of these cases only one culture was taken. In two instances two negative cultures were obtained, and in one instance, three. The last three were from both throat and nose. In twelve of the one hundred ninety-five cases cultures were taken late in the disease but proved negative. In two of these cases one culture was taken, in nine cases two cultures were taken and in one case three cultures were taken. Of the one hundred ninety-five cases, where no positive cultural results were obtained, twenty-one resulted fatally, and doubtless in many the serious condition of the patient and the positive character of the clinical symptoms were reasons for the failure of the physician to take a culture.

There were twenty-one other cases in which the physician did not consider it necessary to take a culture for diagnosis, but in these cases or in their families diphtheria bacilli were afterward found. There were thus in all, two hundred sixteen cases of diphtheria in which the attending physician did not avail himself of the aid of bacteriology in making his diagnosis. This was twenty-seven per cent. of all cases. The year before it was forty per cent.

There were in the families where diphtheria bacilli were found a number of persons who were sick with the symptoms of the disease, but yet in whom no diphtheria bacilli were found or were not found on the first examination. In one instance there were three successive negative cultures (throat and nose), in eight instances there were two successive negatives (six throat and nose), although there were other cases known to be diphtheria in the family, and under the same circumstances there were five instances where one negative (one throat and nose) only was obtained. No subsequent cultures were taken from the above cases, but they were all doubtless true diphtheria. There were also thirty-one instances in which a negative was followed by a positive (of which fourteen were from throat and nose), four instances in which two negatives were followed by a positive (three throat and nose), and one instance where three negatives from throat and nose were so followed. In another instance five throat and nose negatives were followed by a positive. In this and in several preceding cases of negatives followed by a positive, the patient was in the diphtheria ward at the hospital and may very likely have become infected after admission. All of the cultures referred to in this paragraph were for diagnosis and taken early in the disease.

In 1904 there were examined by the state laboratory 2,122, by the city 1,434, and by the hospital laboratory 2,608 cultures. Total, 6,164 cultures. Cultures were taken from eighty scarlet fever cases, thirty-nine at their homes and forty-one at the hospital. Of the latter, ten showed diphtheria bacilli, the others were negative.

It is unquestionably an advantage when diphtheria occurs in a family to remove the well children as speedily as possible in order that they may escape in-

fection. The number of persons thus removed in 1904 was one hundred sixteen, of whom twenty-four were children. In a number of instances persons go away from home and return in a short time and before the warning sign is removed from the house, and of course, are occasionally taken sick on their return. None of these cases is included in the above, but only such cases are considered as remained away until the warning sign was removed. Of the one hundred sixteen cases, six were taken sick while away, on the 1st, 2d, 5th, 5th and 15th day respectively, after removal. One case went away from home on the 2nd day of the disease, came back to the next house nine days later, had diphtheria bacilli six days later and was taken sick two days after that. It is probable that there was communication with the home in this case. In one instance sickness developed after return home, after disinfection. In this case, 120 Home Avenue, the disinfection was twenty-nine days after the initial case and the sickness developed twelve days later. No cultures were taken from the family.

Since records have been kept there have been removed from home in this disease 1,055 persons, of whom forty-two were attacked after removal and nine were attacked on their return. Additional particulars may be found on pages 81 to 84 in the report of 1903. (Supt. Health—Providence).

From a table preceding can be readily seen how small is the chance of a second family being attacked in a house where there is diphtheria. Of 2,398 such families, only one hundred seventy-three, or a little over seven per cent., became infected. Observation has shown that in nearly all of these cases there was known to be direct and often close intercourse between the first and second families infected. In a large proportion of cases the infection probably takes place before the diagnosis is made and before the warning sign is placed on the house. In the twenty-four instances of the infection of a second family in 1904, I have not included eleven instances in which the secondary infection took place after the second month, as in my opinion such cases most likely received their infection elsewhere. Of the twenty-four instances of second family infection, thirteen were during the first week and nineteen were during the first twelve days. Of these nineteen cases four were after disinfection in the first family, following death or removal to the hospital. Even when it is not known that there is direct communication between the families, such is probable, for the extension during the course of the disease rarely, if ever, takes place except among those people who are evidently careless or have little control over their children. This is so evident that I have for years allowed the children from the non-infected families in most instances to attend school. This, however, is not usually permitted until a culture is taken from throat and nose. In 1904, diphtheria bacilli were found in three of these children. In all, for one reason or another, cultures were taken from two hundred and eight persons, mostly children in second

families in the house, and typical diphtheria bacilli were found in fourteen, one of whom became sick two days later. Besides these, Wesbrook's "solid type" of bacilli were found in seventeen persons.

It must be remembered that in houses with more than one family all usually use the same doors, halls, stairways, cellars, and often the same water-closets, and it can be inferred that the danger of infection by means of such things, which is usually assumed to be very considerable, as a matter of fact practically amounts to nothing. There is also shown to be no danger of the disease being air-borne from one family to another. The facts show that if there is no direct intercourse with the infected family there is no danger to another family living in the same house.

In diphtheria, so in scarlet fever, it is known that in most cases of the extension of the disease after it has been recognized there has been direct communication between the families. In fact, everything goes to show that two or more families may live in the same house using hallways, doors, and even water-closets, in common, without scarlet fever extending from one to the other. All that is necessary is that there shall be absolutely no visiting between the families and that the children shall never meet in play. There is no more evidence that scarlet fever is ever borne by the air from one family to another than that diphtheria is. It is probable, of course, that some of the second families living in the house with scarlet fever that are attacked, get their infection from outside sources. It also appears that some contract it because the warning sign is removed, as sometimes happens, before the first family is free from infection. It also doubtless sometimes happens that families, after maintaining isolation for several weeks, become careless and so permit the extension of the disease during its later stages.

As in diphtheria, so also in scarlet fever, it is of advantage to remove the well children in the family at the earliest possible moment. During the year 1904, there were removed from infected families, for the purpose of protecting them from contagion, three hundred and five well persons, of whom sixty-two were children. None of these had previously had scarlet fever. Of the total number removed fourteen contracted the disease shortly after removal as follows: One on the day of removal, three on the 2d day, two on the 3d, one on the 4th, one on the 5th, one on the 8th, one on the 9th, two on the 10th, one on the 12th, and one on the 18th day. Besides these, four contracted the disease on return home. At 32 Sheldon street the initial case was March 26th. The removal was the same day. The child, 7 years old, was brought back April 4th, and was taken sick April 13. At 39 Hospital street a pair of twins, 5 years old, remained away forty-four days from the initial case, returning two days after disinfection. They were both taken sick three days later. At 117 South street a child seven years old was removed three days after the initial sickness, returned forty-nine days after the

initial sickness and five days after disinfection and was taken sick four days later.

During the past eighteen years there have been removed from families where there was scarlet fever 1,356 persons, of whom one hundred and one were adults, and none of whom had had the disease. Of these 1,356 persons, sixty-six were attacked while away and twenty-three on their return home. This subject is discussed more fully in the report for 1903, pages 99 and 100.

SCITUATE.

REPORT OF HENRY H. POTTER, TOWN CLERK.

6. Albert E. Wood is the health officer.
8. For the most part undertakers have made prompt returns of deaths.

REPORT OF ALBERT E. WOOD, HEALTH OFFICER.

3. One fatal case of typhoid fever was reported in the village of North Scituate during the month of January.

4. Isolation was maintained.
5. The above mentioned case was isolated.

7. Several inspections of sink drains in the village of Rockland were made also one well in which a dog was found, in the village of North Scituate.

11. The Moswansicut Ice Company, A. A. Matthewson, R. B. Rounds, W. F. Angell and W. F. Bowen are the ice dealers of this town.

SMITHFIELD.

REPORT OF OSCAR A. TOBEY, TOWN CLERK.

4. (Nuisance and contagious disease ordinance, see report of 1894, p. 48).
6. Jencks Smith is the health officer.

No report from the health officer.

WOONSOCKET.

REPORT OF WILLIAM C. MASON, CITY CLERK.

2. About 36,474 of the population is supplied by the public water service of this city.

3. About 13,600 of the population have sewer connections.
6. Dr. William C. Munroe is the health officer.

No report from the health officer.

Extracts from the report of Frank H. Mills, City Engineer.

FILTER BEDS.

The new filter bed, for which the contract was made on October 16, 1903, was finished November 2, 1904, owing to the lateness of the season when this contract was let, but little work was done last season, work being resumed as early in the season as possible and continued with a most aggravating slowness, until its completion. The new bed has done most excellent work since it has been in use.

Analysis of sewage and effluent has been made by the State Board of Health and the tables (given in main part of this report under Examination of Sewages) will show the character of the work done by the beds.

The percentage of removal of impurities as shown by the yearly averages are: (Nov. 30, 1903—Nov. 30, 1904).

Free Ammonia.....	60.3 p. c.
Total albuminoid Ammonia.....	88.9 p. c.
Carbonaceous Matter as shown by Oxygen consumed.....	86.8 p. c.
Bacteria.....	97.7 p. c.

These results are the poorest since the filtration plant was established and are caused by the larger amount of sewage treated upon the same area as in the past and also to the fact that the sewage is much stronger, and there is also another reason and that is, the beds were not resurfaced last spring, and that the raking and cleaning had taken at least six inches from the depth of filter material. The secretary of the State Board of Health "Mr. Gardner T. Swarts," has at my request, kindly expressed an opinion as to the working of the beds the past year, as follows: "The effluent of the sand filter beds have been of a poorer quality during the past year than in previous years, although a good percentage of purification has been accomplished." The average dose of sewage for the past year has been about 500,000 gallons per bed, or at the rate of about 1,000,000 gallons per acre. This dose has been applied to each bed one day in four.

For several years a very large amount of sewage from cess-pools, paper and rubbish from everywhere, have been cared for at the West Filter Fields; for the years 1901 and 1902, this amounted to 11,482 loads; during the years 1903 and 1904, there were 8,185 loads, this large reduction being undoubtedly due to the increased number of sewer connections made.

I most earnestly recommend that a new filter bed be built at once, the large increase in the amount of sewage, even now, requires the use of two beds at once many times during the summer months and all the time during the winter months

and it is only by having additional beds that the good character of the work can be kept up.

WASHINGTON COUNTY.

CHARLESTOWN.

REPORT OF GEORGE C. CROSS, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1900, p. 56).
6. Dr. Milton Duckworth is the health officer.
8. Undertakers have made fairly prompt returns of deaths.
9. For the most part clergymen make fairly prompt returns of marriages.

REPORT OF MILTON DUCKWORTH, M. D., HEALTH OFFICER.

3. Two cases of diphtheria, neither of which was fatal, were reported in the village of Niantic during the month of September.
4. Isolation was maintained.
5. Both of the above mentioned cases were isolated.
9. All public nuisances, unsanitary premises, etc., are reported to the town council.
11. John C. Tucker is the ice dealer of this town.

EXETER.

REPORT OF JOHN H. EDWARDS, TOWN CLERK.

6. This town has no health officer.
8. Undertakers have not made prompt returns of deaths.

HOPKINTON.

REPORT OF EDWIN R. ALLEN, TOWN CLERK.

4. (Contagious disease ordinances, see report of 1894, p. 59).
6. Erlo N. G. Barber is the health officer.

REPORT OF HENRY H. CRANDALL, HEALTH OFFICER.

6. Inspections of premises where sickness prevailed were made, and the cess-pools and vaults were found in bad condition in a few cases.
9. All public nuisances, unsanitary premises, etc., are reported to the town council.

11. S. R. Avery & Company, William R. Clarke, and William Burdick are the ice dealers of this town.

NARRAGANSETT.

REPORT OF W. HERBERT CASWELL, TOWN CLERK.

3. There has been no extension of the sewage system of this town during the year. The proportion of the population connected therewith is about one per cent. more than that of the previous year.

4. No new sanitary ordinances were enacted during the year. The present ones have been fairly well enforced.

(Ordinance in reference to sewers, see report of 1901, p. 47.)

6. Solomon H. Hale is the health officer.

8. Undertakers have made fairly prompt returns of deaths.

9. Clergymen are fairly prompt in making returns of marriages.

REPORT OF SOLOMON H. HALE, HEALTH OFFICER.

3. One case of typhoid was reported in this town during the month of December.

4. Isolation was maintained.

5. The above mentioned case was isolated.

6. Inspection of the premises where the above mentioned case occurred was made.

9. All public nuisances, unsanitary premises, etc., are reported to the town council.

11. Browning and Griffin are the ice dealers of this town.

NORTH KINGSTOWN.

No reply from the town clerk.

(Nuisance and contagious disease ordinances, see report of 1896, p. 60.)

REPORT OF HAROLD METCALF, M. D., HEALTH OFFICER.

4. Isolation was maintained.

5. All of the sick were isolated.

6. Inspections of premises where sickness prevailed were made, whenever deemed necessary. The sanitary conditions were fairly good.

7. Sanitary inspections of individual houses were made at my own option.

9. All public nuisances, unsanitary premises, etc., are reported to the town council whenever necessary.

11. J. B. Brayman, John Maglone, George Orpen and John Rose are the ice dealers of this town.

RICHMOND.

REPORT OF HALSEY P. CLARKE, TOWN CLERK.

4. (Contagious disease and nuisance ordinance, see report of 1894, p. 61).

6. Charles A. Fuller is the health officer.

9. Clergymen do not make returns of marriage promptly.

REPORT OF C. A. FULLER, HEALTH OFFICER.

11. S. R. Avery and W. R. Clark are the ice dealers of this town.

SOUTH KINGSTOWN.

REPORT OF HOWARD B. PERRY, TOWN CLERK.

4. (Nuisance ordinance, report of 1903, p. 52; contagious disease ordinance, report of 1896, p. 64).

6. Oscar Gardner is the health officer.

REPORT OF OSCAR GARDNER, HEALTH OFFICER.

3. There were six cases of typhoid fever, one of which was fatal, reported in this town during the year.

4. Isolation was not maintained.

6. Inspections of premises where sickness prevailed were made, but nothing of an unsanitary nature could be found.

9. Public nuisances, unsanitary premises, etc., are not reported to the town council.

11. Asa Sweet, George Holly, and George F. Priday are the ice dealers of this town.

WESTERLY.

REPORT OF WILLIAM HONSEY, TOWN CLERK.

The following ordinances pertaining to health matters as enacted and amended went into operation and effect on April 15, 1904; all previous ordinances being at the same time repealed:—

AN ORDINANCE IN RELATION TO THE REGISTRATION OF BIRTHS AND DEATHS,
AND THE INTERMENT OF THE DEAD.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. There shall be appointed by the Town Council a sufficient number of persons to act as undertakers, removable at the pleasure of the Town Council.

SEC. 2. No persons shall bury, or place in a tomb, or remove from the town or otherwise dispose of the body of any human being who shall die in this town, without first reporting the death to the Town Clerk and obtaining a permit from him, under a penalty of not less than five dollars nor more than twenty dollars for each and every offence.

SEC. 3 No permit shall be given as provided in section two, until the Town Clerk is furnished with the information in relation to the deceased person, required by the laws of the state for record, so far as the same can be ascertained, together with the physician's certificate of the cause of death, whenever a physician has been in attendance, or a medical examiner's or coroner's certificate. Whenever a permit for burial is applied for, in a case of death without the attendance of a physician, or if it is impossible to obtain the physician's certificate, it shall be the duty of the Town Clerk to investigate the case so far as may be necessary; and when he has obtained satisfactory evidence in relation to the cause and circumstances of the death, he shall sign the certificate and give the required permit. If not satisfied in relation to the cause and circumstances of the death, or if, in his opinion, the public good requires it, he shall report the case to a coroner for investigation.

SEC. 4. Whenever the body of a human being who has died out of the town shall be brought here for burial, it shall be the duty of the undertaker, or other person attending the funeral, to furnish the report required in sections two and three, with the exception of the physician's, medical examiner's, or coroner's certificate; and in case of neglect or failure so to do, such person shall forfeit and pay not less than five dollars nor more than twenty dollars for each and every offence.

SEC. 5. All funerals shall take place between sunrise and sunset, unless otherwise permitted or directed by the Town Council.

SEC. 6. No undertaker or other person shall bury or cause to be buried the body of any deceased person in this town, except in such grounds as are now known and used as burying grounds, or such as shall hereafter be by the Town Council designated as burying grounds, and authorized to be used as such; and every person violating this section of this ordinance shall forfeit and pay a sum of not less than five dollars nor more than twenty dollars for each offence.

AN ORDINANCE IN RELATION TO THE PREVENTION AND SPREADING OF CONTAGIOUS DISEASES AMONG CHILDREN ATTENDING PUBLIC SCHOOLS.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. Whenever a case of scarlet fever, diphtheria, or membranous croup exists in any tenement, cellar, or building used as a dwelling place, within the limits of said town of Westerly, the child or children belonging to or residing with any family occupying any such tenement, cellar, or building, where a person is sick with any of the aforesaid diseases, is forbidden to attend any school until the physician in attendance shall have given a certificate over his own signature, stating that every symptom of the affection of the throat and skin has completely disappeared, and that the patient's body, clothing, bedding, and apartments have been thoroughly cleansed and disinfected to his personal knowledge.

SEC. 2. Any adult person of the age of twenty-one or more years having the care, custody or control of such child or children and allowing any of such children to attend school in violation of this ordinance shall be fined not less than five dollars nor more than twenty dollars, said fine to inure, one-half thereof to the use of the complainant and one-half thereof to the use of the town.

AN ORDINANCE FOR OBTAINING REPORTS OF CASES OF CONTAGIOUS, INFECTIOUS, OR EPIDEMIC SICKNESS.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. Every physician having knowledge of the existence of any case of contagious, infectious, or epidemic disease other than smallpox, within the town of Westerly, shall immediately make a report thereof in writing to the superintendent of health of said town, with such particulars as the said superintendent may indicate on blanks furnished for that purpose.

SEC. 2. The diseases referred to in the preceding section shall include especially diphtheria, scarlet fever or scarlatina, cerebro-spinal meningitis or spotted fever, and membranous croup.

SEC. 3. Any physician who shall fail to comply with the preceding regulations shall be fined not more than twenty dollars for each day of such neglect, after having knowledge thereof as aforesaid, said fine to inure one-half thereof to the use of the complainant and one-half thereof to the use of the town.

AN ORDINANCE FOR OBTAINING REPORTS OF DEATHS FROM CONTAGIOUS, INFECTIOUS, OR EPIDEMIC DISEASES.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. Every physician having knowledge of the death of any person within the town of Westerly from any contagious, infectious or epidemic dis-

ease, upon whom he had been in attendance, shall immediately make a report thereof in writing to the superintendent of health of said town.

SEC. 2. Any physician who shall fail to comply with the preceding section shall be fined not more than twenty dollars for each day of such neglect after having knowledge thereof as aforesaid, said fine to inure one-half thereof to the use of the complainant, and one-half thereof to the use of the town.

AN ORDINANCE IN RELATION TO THE KEEPING OF SWINE.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. No swine shall be kept within the limits of the compact part of this town without a license therefor being first granted by the superintendent of health, specifying the place for keeping said swine.

SEC. 2. All licenses to keep swine shall be for the current year and shall terminate on the last day of December in each year, and shall be issued by the superintendent of health, specifying the place for keeping said swine, without cost to the applicant, and shall contain the condition that said license may be revoked at any time by said superintendent.

SEC. 3. Every person who shall keep any swine within the limits of the compact part of this town without first obtaining a license as aforesaid, or after notice that such license has been revoked as aforesaid, or who shall violate any of the provisions of this ordinance, shall pay a fine of twenty dollars.

AN ORDINANCE IN RELATION TO PRIVY VAULTS AND CESSPOOLS.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. No person shall allow the contents of any privy vault or cess-pool to become in any way a nuisance or offensive; and when required by the superintendent of health every owner, occupant, agent or other person having charge of the land on which any privy vault or cesspool is located, shall disinfect the same in such manner as may be required by said superintendent; and every such owner, occupant, agent or other person who shall neglect or refuse to disinfect the contents of any privy vault or cesspool, so as to remove all offensive odors therefrom, within thirty-six hours after receiving notice so to do from the superintendent of health, shall be punished as hereinafter provided.

SEC. 2. No person shall at any time place or deposit in any street-opening to any sewer, any animal or vegetable matter whatever, solid or liquid, or any other filthy substance.

SEC. 3. No person shall deposit or allow to be deposited in any privy vault or cesspool, or water closet, any swill, rubbish, refuse, or any other substance ex-

cept that of which any such place is the appropriate receptacle, nor shall any surface water be allowed to run into any privy vault or cesspool.

SEC. 4. No person or persons, either by themselves or by their agents or servants, shall carry or cause or permit to be carried, into or through any highway or street in this town, any part of the contents of any cesspool, in any cart, wagon or other vehicle, except between the first day of December and the first day of May, without the written permission of the superintendent of health.

SEC. 5. No person or persons, either themselves or by their agents or servants, shall carry the contents of any such cesspool, or any part thereof, through or across any highway or street in this town, in any cart, wagon, or other vehicle, which shall not be effectually covered, water-tight, and kept well painted and cleaned on the outer surface.

SEC. 6. No person shall remove or transport through any street or highway in the town the contents of any cesspool, or any offensive substance or liquid, unless the same shall be removed or transported in such manner as shall prevent the escape upon the vehicle on which the same is conveyed, or upon the street or highway, of any such material or liquid so removed or transported as aforesaid.

SEC. 7. No person or persons shall station or stand, or suffer to be stationed or to stand, any cart, wagon, or other vehicle having therein any part of the contents of any cesspool (except while loading) in any highway or street in the town.

SEC. 8. Every cart, wagon or other vehicle used within this town to carry the contents of any cesspool or any part thereof, into or through any part of any highway or street in this town, shall be licensed, and shall have placed upon the outside, and on each side of the same, and so that the same can be distinctly seen, a tin sign, with the number of the license and the number of cubic feet such vehicle will contain, in plain, legible, white figures of not less than three inches in size upon a black ground, and every such license shall be granted by the superintendent of health without charge.

SEC. 9. No person shall use, or permit or suffer to be used, any such cart, wagon, or other vehicle without the same being licensed and numbered as aforesaid.

SEC. 10. No person licensed as aforesaid shall deposit the contents of any privy vault or other cesspool matter within one thousand feet of any dwelling house or building occupied as a dwelling house, without the consent of the person or persons occupying such dwelling house or building; such permission to be in writing and filed with the superintendent of health.

SEC. 11. Every owner, occupant, agent, or other person having charge of the land on which any privy vault within the limits of this town is located, shall cause

such vault to be emptied at least once between the first day of December and the first day of May in every year, and at no other time without the written permission of the superintendent of health.

SEC. 12. Every person violating any of the provisions of the eleven preceding sections shall pay a fine of twenty dollars, said fine to inure one-half thereof to the use of the complainant, and one-half thereof to the use of the town.

AN ORDINANCE IN RELATION TO SPITTING ON SIDEWALKS, ELECTRIC CARS, ETC.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION. 1. No person shall expectorate, discharge or deposit any spittle, phlegm, tobacco juice or other like substance or matter on any of the sidewalks or crosswalks within the compact part of this town, or on or in any public building, electric car, public bus, or other public conveyance within the limits of this town.

SEC. 2. Any person violating any of the provisions of the foregoing sections shall be fined not less than two dollars nor more than ten dollars.

AN ORDINANCE IN RELATION TO EPIDEMIC AND CONTAGIOUS DISEASES, DEATHS THEREFROM AND THE QUARANTINE THEREOF.

It is ordained by the Town Council of the Town of Westerly, as follows:

SECTION 1. Every person or physician who shall have knowledge of the existence of any case of scarlet fever or diphtheria or membranous croup in this town shall at once notify the superintendent of health, who shall immediately quarantine the house or building where such case is, by affixing to the outside of said house or building, a placard, with the words scarlet fever or diphtheria, as the case may be, and in the case of membranous croup the sign shall be the same as that used in cases of diphtheria, printed thereon in large type, and said house or building shall then be deemed to be under quarantine. In case of a death from one of these diseases, the warning sign or placard shall remain on the house when the body has been removed from the house, and shall only be removed as herein provided.

SEC. 2. No person shall remove, destroy, or deface such placard without the written permission of the said superintendent of health.

SEC. 3. When any house or building shall have been quarantined as aforesaid, such quarantine in cases of scarlet fever shall not be raised or removed until the superintendent of health shall be assured by the attending physician that desquamation has entirely ceased, but in no case shall quarantine be raised or removed in less than three weeks after the beginning of the last case occurring

in any house or building; and in cases of diphtheria and membranous croup quarantine may be raised or removed after fourteen days have elapsed from the time of disappearance of the membrane from the throat of the last case occurring in any house or building.

SEC. 4. Any person violating any of the provisions of the foregoing section shall be fined not less than five dollars nor more than ten dollars.

SEC. 5. No person sick with either of the aforesaid diseases shall leave the house until the warning sign or placard has been removed as above provided, except with the permission of the superintendent of health, and no parent or guardian, or other person having charge of a minor, sick or afflicted with either of the aforesaid diseases, shall permit such minor to leave the house until the warning sign or placard is removed. Any person violating any of the provisions of this section shall be fined five dollars.

SEC. 6. The funeral of any person who has died while suffering from or afflicted with either of the aforesaid diseases, and the funeral of any person who has died while any member of the family of such person is suffering from or afflicted with either of the aforesaid diseases, shall be private, and attendance thereat shall be limited to the immediate relatives of the deceased, adult pall bearers, clergyman and undertaker, together with such other persons as shall have received from the said superintendent of health permission to be present.

SEC. 7. No person who has the care or custody of the body of any person who has died while suffering from or afflicted with either of the aforesaid diseases, and no person who has the care or custody of the body of any person who has died while any member of the family is suffering from or afflicted with either of the aforesaid diseases, shall permit any funeral other than such as is specified in the foregoing section, and no person having the care or custody of such body shall permit any assemblage or gathering to be held in any house containing such body, and when such body has been placed in a casket, the casket shall be immediately closed, and if the superintendent of health shall deem necessary, shall be sealed under his direction, and said casket shall not be opened again before burial.

SEC. 8. No undertaker or clergyman shall assist at the funeral of any person who has died as aforesaid unless such funeral shall be conducted according to the provisions of the foregoing section.

SEC. 9. Every person violating any of the provisions of the next preceding three sections shall be fined not less than five dollars nor more than twenty dollars for each offence.

6. Lewis Stanton is the health officer.

7. Gratuitous vaccination was provided during the year and fourteen persons in the village of White Rock availed themselves of the same.

No report from the health officer.

The following data is extracted from the report of the Board of Water Commissioners:

SUMMARY OF STATISTICS.

REPORT OF 1903-04. (APRIL 30 TO APRIL 30).

In accordance with suggestions adopted by the New England Water Works Association:

By whom owned, Town of Westerly.

Works built by company in 1886-87.

Purchased by Town of Westerly 1897.

Source of supply, driven wells.

Mode of supply, pump to tank.

1. Builder of pumping machinery, Henry R. Worthington.

2. Description of coal used, George's Creek, Cumberland.

3. Coal consumed, for the year, 1,367,310 pounds.

4. Total pumpage for the year, in gallons, 246,014,500.

5. Average static head against which pumps work, 195.

6. Average dynamic head against which pumps work, 210.

7. Number of gallons pumped per pound of coal, 180.

8. Duty, $\frac{\text{Gallons pumped (4)} \times 834 \times 100 \times \text{dynamic head (6)}}{\text{Total fuel (3) no allowance}}$ $\left\{ \begin{array}{l} 29,487,000 \\ 35,915,000 \end{array} \right.$

9. Pounds of coal per million gallons pumped, 5,578.

Costing of pumping figured on Pumping Station expenses \$6,250.13.

10.	Per million gallons, raised against (dynamic) head in tank.	\$25.45
11.	Per million gallons, raised one foot high (dynamic).	\$0.121
12.	Cost of pumping, figured on net maintenance.	\$23,405.42
13.	Per million gallons, raised against (dynamic) head into tank. . .	\$95.13
14.	Per million gallons, raised one foot high (dynamic).	\$0.45

CONSUMPTION.

1.	Estimated total population, Westerly and Watch Hill. 10,000	
	Estimated total population, Pawcatuck.	3,500
		13,500
2.	Estimated population on lines of pipe.	12,000
3.	Estimated population, supplied to date.	11,000
4.	Total gal. consumed for the year.	246,014,500

5.	Average daily consumption in gallons.....	672,170
6.	Gallons per day to each inhabitant (2)	56
7.	Gallons per day to each consumer (3).....	61
8.	Gallons per day to each tap (services 4).....	464

EXAMINATION OF WATER SUPPLIES.

Since 1894 the Board has made monthly analyses of the water supply of the city of Providence, which is taken from the Pawtuxet river.

The samples have been taken at three different points: At the Pettaconset pumping station; at Washington village, on the south branch, at a point above any known source of contamination; and at the village of Hope, on the north branch of the river, above any possible source of contamination from villages, residences, or manufacturers. A sample is also taken from a tap in the laboratory of the State Board of Health in Providence.

These reports have been of considerable service in determining the quality of the supply at various points, and permitting of comparison as to their value and the possibility of pollution at any point between the sources of supply and the intake.

At a time when the question as to the necessity of filtering the supply before serving it to the city arose, a proposal that it might be more desirable to take the supply direct from the reservoirs to be constructed on one of the branches of the river above possible sources of pollution was presented. By reference to the published results of these examinations, it is determined that a vast amount of contamination entered the water between the two upper branches and the intake or pumping station. This arises largely from the surface drainage from fields and villages along the stream, and from the large amount of sediment which has accumulated in the bed of the river.

While the stream is running evenly the sediment is caught in the various reservoirs at the dams connected with the several industries along the banks of the stream. As soon as a mill starts up a rush

of water follows, stirring up and carrying along the sediment which was lying in the shallow stream. This mixture is received at the pumping station, giving a polluted water.

Owing to the distance of the heads of the river, however, and to the probable excessive cost of acquiring control of the water-shed, the proposition of obtaining a supply from the upper branches has been left in abeyance.

An examination of this water supply has been obtained by the engineer's department of the city of Providence for many years, one sample being taken on the first and fifteenth of every month. All of the above examinations since 1894 will be found in detail by months in the previous reports of the Board. The averages of the several years since 1900 will be found in this report in conjunction with the monthly reports.

Filtration for the supply of the city of Providence bids fair to be a reality now before long.

While the supply of the city of Providence is the largest and most important of any in the State, inasmuch as it supplies the largest population, it was believed by the Board that it was equally important that all potable public water supplies in the State should be examined periodically, first to determine their fitness for a drinking-water, and, second, to be posted as to any change which might take place in the character of the water at any time and especially in the presence of an epidemic of any water-borne disease, as the Board would be in a position to determine if any deterioration in the character of the water had occurred at the time and if it might have any influence in the production of the epidemic.

Accordingly, since 1900, chemical and bacteriological examinations of all the public water supplies have been made monthly, and as before, in the case of the Providence supply, twice a month.

These were found to vary in quality from what might be considered as perfect, to a condition which indicated that the continued use of the water might at any time be dangerous to the health of the consumers.

The information thus obtained indicated that one supply, that of East Providence, ought to receive immediate attention, and purification of this supply was secured by means of mechanical filtration. The studies of this process have been available for the installation of other filter plants desiring to use this form of filtration. This system has been found to be successful and manageable.

In only four instances are the supplies owned by the cities where the water is used; namely, the city of Providence, the city of Pawtucket, the city of Woonsocket, and the town of Westerly. In the Pawtuxet Valley there are four public water supplies. These are operated by private water companies. The water-sheds of all four are practically free from possible contamination or pollution, being free from habitations and industrial plants. They are called the East Greenwich Water Company, the Pawtuxet Valley Water Company, the Coventry Water Company, and one known as Knight's Spring.

The results of the analyses of this group will be found in the following tables under the heading of Pawtuxet Valley water supply, and indicate that they are of very good quality for surface supplies.

The supply of Westerly, from driven wells, ranks as the best supply in the State.

The supply at Block Island is taken from a pond which receives a certain amount of surface flow. The water-shed is free from habitation. The pond is supposed to be fed also from springs. The quality is fairly good, though, like a number of the waters in the State, liable to be infected with algæ growths of different forms which at times produce a disagreeable odor and taste in the drinking-water.

The supply of Woonsocket is received from a large water-shed which is owned or controlled by the city. The shed is closely watched and inspected. Practically no habitations are located on the area. The supply is a sanitary water as far as chemical and bacteriological analyses show, but the source, being a surface supply and the storage being in contact with organic and earthy matter, the

water has quite a high color and a slightly vegetable or woody taste. This can be corrected only by filtration.

The city of Newport derives its supply from two or three streams which run through a rather level water-shed, the area of which is fairly well inhabited. This is utilized for pasturage for cattle, sheep, and fowl, and in some instances the streams have been utilized as a drainage disposal system for individual residences. The color of the water is not very high, but the taste is not of a potable standard. The organic matter is variable with the season.

The town of Jamestown is supplied from two different sources, one called the South Station, and the other located further up the Island of Conanicut and called the North Station. The former supplies a white water, while the latter is darker in color, and shows more organic matter when examined chemically.

The supply at Wakefield and Narragansett Pier is derived from a flat water-shed, not thickly inhabited, but is impounded in reservoirs where much coloring matter is taken up from the decay of vegetable matter such as stumps, trees, and leaves. The only means of securing a white potable water with this supply would be by the use of filtration. Owing to the small consumption, such expense at the present time might not be warranted. About four or five years ago, a mechanical filter was installed and then abandoned after a few weeks use on account of objection by some consumers to the use of alum in the process.

The Bristol Water Works, supplying the towns of Bristol and Warren, derives its supply from surface flow being impounded in two reservoirs. The upper one, being flooded over stumps and decaying vegetable matter, delivers considerable decomposed organic matter to the lower reservoir.

The accumulation of this material for many years in the lower reservoir has produced a condition whereby the water held in storage in the upper reservoir may become increased in color and in all organic constituents after passing through the lower reservoir and before being pumped into the mains.

The location of the lower reservoir was an area which was previously flooded by the tidal salt water from Mount Hope bay. The dam for holding back the fresh water is so near to the high-water line that at high tides the salt water may exchange its saline qualities from the outside into the storage reservoir above the dam.

With an extremely high tide and a strong wind the salt water from without may at times overcome the baffle-boards or flap-gates of the dam and the water in the lower reservoir becomes saturated with chlorine, and the resulting analyses must necessarily at times be freaky with the variations in the tide and weather conditions.

The color is extremely high. The taste is musty and not enticing to the average person who drinks water.

Spasmodic attempts have been made from time to time to rectify these conditions, but owing to a difference of opinion between the private owners of the supply and the town as to the value of the whole plant, and water company business, naturally no attempt would be made to rectify the character of the water. It is to be hoped that, after the legal masters to whom the business status has been referred make their report a satisfactory agreement may be arrived at. The investigation and complaint of the State Board of Health described in the two previous reports resulted in no change of the questionable conditions of possible pollution which have existed.

Pawtucket continues to maintain inspection of the streams contributing to the supply, and the water stands well in quality with the average unfiltered surface supplies of the State.

The periodical examination of these water supplies gives valuable working data to the Board in the presence of a prevalence of any water-borne or communicable disease.

While typhoid fever and cholera are the only two diseases which are considered as water-borne at the present time, the periodical examination of these supplies supplies information to the Board which can be acted upon promptly to the advantage of any town or city which has been afflicted.

If the causation of an epidemic is directly traced to a water supply, the records of the results of the chemical and bacteriological tests allow of certain deductions of exclusion or possible inclusion as a causative factor, thus permitting of immediate determination and also more earnest effort in other directions to determine a possible source of infection.

The following tables present the results of the periodical analyses of the different supplies.

The results are given by months, also by yearly averages, and in groups, where the supplies come from the same neighborhood or where there are samples taken at different points in the course of the flow of the supply.

The figures in the following tables given as the averages for the residue on evaporation, hardness, and alkalinity determinations are to the nearest .05 part per 100,000, that being the accuracy of the methods used for these determinations.

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the Pawtuxet River, at Pumping Station at Pettaconset, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.									
								Total.	In Solution.	In Suspension.							
Jan. 14.....	dist.	dec.	.35	5.00	1.35	3.65	.0090	.0184	.0140	.0044	.45	.022	.0002	.54	1.11	.71	1031
Jan. 28.....	dist.	dec.	.35	4.90	1.45	3.45	.0050	.0198	.0162	.0036	.38	.023	.0001	.61	1.27	.51	1994
Feb. 11.....	dec.	dist.	.34	5.45	1.95	3.50	.0064	.0168	.0144	.0024	.43	.038	.0002	.58	1.56	.50	1441
Feb. 25.....	dist.	dist.	.36	4.40	1.60	2.80	.0036	.0190	.0146	.0044	.24	.008	.0001	.69	1.56	.45	4174
Mar. 10.....	dec.	dist.	.35	3.85	1.70	2.15	.0040	.0198	.0172	.0026	.25	.010	.0001	.62	1.03	.40	9734
Mar. 24.....	dec.	dist.	.31	3.60	1.30	2.30	.0010	.0160	.0124	.0036	.22	.013	.0000	.60	1.27	.39	969
April 6.....	dist.	dist.	.32	4.30	1.65	2.65	.0014	.0174	.0144	.0030	.28	.025	.0002	.53	0.95	.30	2232
April 24.....	sl.	sl.	.45	4.30	1.75	2.55	.0014	.0162	.0136	.0026	.32	.014	.0000	.57	1.27	.50	441
May 5.....	sl.	sl.	.41	4.15	1.10	3.05	.0014	.0162	.0138	.0024	.31	.020	.0002	.55	1.27	.60	715
May 19.....	dist.	dist.	.55	4.70	2.10	2.60	.0024	.0228	.0192	.0036	.38	.021	.0002	.67	1.43	.45	3100
June 9.....	dist.	sl.	.53	4.85	1.90	2.95	.0020	.0266	.0222	.0044	.41	.021	.0004	.63	1.35	.60	6696
June 23.....	dist.	dist.	.45	5.15	1.90	3.25	.0014	.0268	.0200	.0068	.44	.015	.0006	.59	1.27	.90	Lost.
July 6.....	dist.	dist.	.37	4.65	1.80	2.85	.0012	.0220	.0176	.0044	.40	.022	.0004	.46	1.11	.80	1952
July 21.....	dist.	dec.	.50	4.70	1.40	3.30	.0010	.0258	.0208	.0050	.45	.009	.0002	.59	1.27	.95	1125
Aug. 4.....	dec.	dist.	.49	6.40	2.05	4.35	.0010	.0316	.0228	.0088	.52	.013	.0006	.47	1.82	1.05	7646
Aug. 25.....	dist.	dec.	.60	5.60	2.05	3.55	.0014	.0264	.0204	.0060	.44	.012	.0001	.72	1.43	.61	559
Sept. 8.....	dist.	dec.	.56	6.45	2.45	4.00	.0016	.0324	.0254	.0070	.45	.014	.0006	.69	1.56	.70	5084
Sept. 22.....	dist.	dec.	.63	6.35	2.45	3.90	.0010	.0272	.0210	.0062	.46	.012	.0002	.76	1.50	.50	381
Oct. 5.....	dist.	dec.	.60	6.10	1.55	4.55	.0020	.0250	.0228	.0022	.52	.015	.0010	.76	1.56	.92	4144
Oct. 20.....	dec.	dist.	.64	7.30	2.55	4.75	.0034	.0270	.0234	.0036	.52	.019	.0004	.84	1.82	.65	1455
Nov. 10.....	dist.	dist.	.50	6.00	2.25	3.75	.0030	.0192	.0166	.0026	.57	.020	.0004	.63	1.69	.71	954
Nov. 22.....	dec.	dec.	.47	5.95	2.30	3.65	.0018	.0246	.0184	.0062	.50	.031	.0002	.71	1.56	.75	Lost.
Dec. 8.....	dist.	dist.	.55	5.85	1.95	3.90	.0034	.0206	.0162	.0044	.53	.025	.0010	.68	1.76	.61	5766
Dec. 22.....	dec.	dec.	.45	6.55	2.50	4.05	.0046	.0254	.0218	.0036	.50	.028	.0006	.71	1.82	.70	4811
Yearly avg....	dist.	dist.	.46	5.30	1.90	3.40	.0027	.0226	.0183	.0043	.42	.019	.0003	.63	1.45	.65	3000

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the South Branch of the Pawtuxet River, at Washington, above all sources of pollution, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.					NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 14.....	v. sl.	sl.	.39	3.90	1.05	2.85	.0126	.0132	.0110	.0022	.33	.009	.0000	.47	.70	.70	505
Jan. 28.....	v. sl.	sl.	.41	3.80	1.40	2.40	.0058	.0134	.0120	.0014	.30	.009	.0000	.57	.79	.35	3968
Feb. 11.....	dist.	v. sl.	.33	3.80	1.15	2.65	.0054	.0116	.0102	.0014	.31	.010	.0002	.48	.70	.50	1074
Feb. 25.....	sl.	dist.	.32	3.35	1.00	2.35	.0034	.0176	.0130	.0046	.18	.003	.0001	.57	.32	.32	5890
Mar. 10.....	dist.	sl.	.39	3.30	1.30	2.00	.0040	.0180	.0154	.0026	.25	.005	.0002	.60	1.03	.39	4278
Mar. 24.....	v. sl.	sl.	.31	3.00	1.20	1.80	.0042	.0150	.0106	.0044	.25	.006	.0006	.46	.79	.31	451
April 6.....	v. sl.	sl.	.32	3.00	1.10	1.90	.0022	.0160	.0134	.0026	.21	.016	.0002	.51	.48	.20	68
April 21.....	sl.	sl.	.45	3.40	1.40	2.00	.0016	.0170	.0148	.0022	.28	.003	.0000	.50	.63	.40	84
May 5.....	sl.	sl.	.56	3.75	1.35	2.40	.0020	.0176	.0142	.0034	.25	.002	.0000	.69	.40	.30	139
May 19.....	sl.	sl.	.65	3.50	1.60	1.90	.0024	.0192	.0146	.0046	.24	.003	.0000	.68	.55	.40	405
June 9.....	sl.	sl.	.56	3.05	1.50	1.55	.0036	.0222	.0204	.0018	.28	.005	.0000	.60	.48	.42	288
June 23.....	sl.	sl.	.50	3.40	1.55	1.85	.0014	.0206	.0176	.0050	.26	.002	.0000	.59	.55	.50	Lost.
July 8.....	sl.	sl.	.61	3.30	1.45	1.85	.0016	.0216	.0202	.0014	.29	.002	.0000	.65	.79	.50	303
July 21.....	sl.	sl.	.65	3.35	1.50	1.85	.0028	.0248	.0232	.0016	.23	.003	.0000	.60	.55	.55	229
Aug. 4.....	sl.	v. sl.	.65	3.45	1.50	1.95	.0050	.0244	.0234	.0010	.29	.003	.0000	.58	.95	.45	167
Aug. 25.....	v. sl.	sl.	.71	4.30	1.45	2.85	.0036	.0234	.0226	.0008	.27	.003	.0000	.75	.55	.40	177
Sept. 8.....	v. sl.	sl.	.68	4.40	1.75	2.65	.0022	.0224	.0222	.0002	.28	.003	.0000	.67	.63	.50	590
Sept. 22.....	dist.	sl.	.62	4.60	1.70	2.90	.0024	.0206	.0190	.0016	.31	.005	.0000	.72	.63	.40	210
Oct. 5.....	sl.	sl.	.66	4.45	1.95	2.50	.0046	.0204	.0196	.0008	.31	.004	.0000	.71	.70	.40	243
Oct. 20.....	sl.	v. sl.	.60	4.25	1.25	3.00	.0058	.0170	.0164	.0006	.34	.005	.0000	.55	.87	.52	91
Nov. 10.....	sl.	v. sl.	.55	4.25	1.70	2.55	.0030	.0174	.0146	.0028	.36	.004	.0000	.55	.63	.55	34
Nov. 22.....	dist.	sl.	.61	4.40	1.80	2.60	.0028	.0184	.0154	.0030	.35	.006	.0000	.70	.55	.45	59
Dec. 8.....	v. sl.	sl.	.49	3.55	1.15	2.40	.0054	.0152	.0132	.0020	.36	.008	.0000	.54	.79	.60	101
Dec. 22.....	dist.	v. sl.	.37	4.20	1.45	2.75	.0078	.0122	.0116	.0005	.33	.014	.0000	.43	.79	.75	109
Yearly avg...	sl.	sl.	.51	3.75	1.45	2.30	.0040	.0183	.0162	.0021	.23	.005	.0001	.59	.65	.45	846

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the North Branch of the Pawtuxet River at Hope, above all sources of pollution, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Hardness.	Alkalinity.	Bacteria per c. c.		
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.				As Nitrites.	Oxygen Consumed.
								Total.	In Solution.	In Suspension.							
Jan. 14.....	v. sl.	sl.	.35	3.75	1.35	2.40	.0038	.0116	.0102	.0014	.25	.010	.0000	.43	.63	.49	812
Jan. 28.....	v. sl.	sl.	.35	3.70	1.25	2.45	.0018	.0106	.0098	.0008	.30	.009	.0000	.47	.79	.55	1148
Feb. 11.....	v. sl.	v. sl.	.30	3.60	1.35	2.25	.0012	.0100	.0096	.0004	.28	.011	.0000	.44	.95	.52	825
Feb. 25.....	v. sl.	v. sl.	.32	3.05	1.15	1.90	.0020	.0130	.0116	.0014	.22	.005	.0000	.51	.40	.40	9362
Mar. 10.....	sl.	v. sl.	.30	3.10	1.35	1.75	.0012	.0146	.0140	.0006	.19	.004	.0000	.48	.79	.35	2604
Mar. 24.....	v. sl.	sl.	.30	3.20	1.15	2.05	.0010	.0132	.0110	.0022	.18	.005	.0000	.44	.55	.35	601
April 6.....	v. sl.	v. sl.	.27	2.85	1.05	1.80	.0008	.0116	.0102	.0014	.19	.013	.0000	.38	.48	.30	151
April 21.....	v. sl.	v. sl.	.30	3.10	1.10	2.00	.0016	.0100	.0100	.0000	.22	.004	.0000	.37	.55	.40	92
May 5.....	v. sl.	v. sl.	.35	3.30	1.10	2.20	.0016	.0128	.0118	.0010	.24	.006	.0000	.45	.63	.50	258
May 19.....	v. sl.	sl.	.41	3.25	1.35	1.90	.0014	.0140	.0136	.0004	.25	.005	.0000	.52	.79	.52	247
June 9.....	sl.	sl.	.40	3.15	1.35	1.80	.0014	.0162	.0152	.0010	.24	.006	.0000	.48	.79	.52	85
June 23.....	sl.	sl.	.35	3.15	1.30	1.85	.0012	.0164	.0146	.0018	.25	.004	.0000	.44	.79	.70	Lost.
July 6.....	sl.	sl.	.35	3.35	1.15	2.20	.0010	.0166	.0140	.0026	.29	.004	.0000	.39	.79	.70	314
July 21.....	v. sl.	sl.	.35	3.25	1.15	2.10	.0016	.0172	.0156	.0016	.30	.004	.0000	.38	.79	.70	245
Aug. 4.....	sl.	sl.	.36	3.40	1.35	2.05	.0016	.0194	.0172	.0022	.28	.006	.0000	.39	.95	.55	825
Aug. 25.....	v. sl.	sl.	.52	4.10	1.50	2.60	.0016	.0206	.0204	.0002	.28	.003	.0000	.69	.63	.50	237
Sept. 8.....	v. sl.	sl.	.40	4.00	1.25	2.75	.0014	.0202	.0180	.0022	.27	.004	.0000	.45	.95	.55	171
Sept. 22.....	dist.	sl.	.56	4.60	2.00	2.60	.0012	.0216	.0196	.0020	.28	.004	.0000	.77	.79	.49	112
Oct. 5.....	sl.	v. sl.	.51	4.10	1.65	2.45	.0012	.0184	.0174	.0010	.28	.006	.0000	.66	.95	.52	260
Oct. 20.....	v. sl.	v. sl.	.52	4.15	1.40	2.75	.0018	.0176	.0170	.0006	.33	.005	.0000	.64	.95	.50	290
Nov. 10.....	v. sl.	v. sl.	.40	3.85	1.70	2.15	.0016	.0120	.0116	.0004	.34	.007	.0000	.47	.95	.60	93
Nov. 22.....	v. sl.	v. sl.	.46	3.50	1.20	2.30	.0010	.0132	.0116	.0016	.34	.006	.0000	.56	.71	.60	71
Dec. 8.....	v. sl.	sl.	.35	3.95	1.15	2.80	.0020	.0132	.0112	.0020	.33	.011	.0000	.43	.79	.60	245
Dec. 22.....	v. sl.	v. sl.	.30	4.05	1.40	2.65	.0022	.0108	.0086	.0022	.33	.014	.0000	.36	.79	.65	128
Yearly avg...	v. sl.	sl.	.38	3.55	1.30	2.25	.0016	.0148	.0135	.0013	.27	.007	.0000	.48	.75	.50	834

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, taken from the Tap in the Laboratory of the State Board of Health, in Providence, collected during the second and fourth week of the month.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 14.....	sl.	sl.	.37	5.05	1.60	3.45	.0052	.0150	.0124	.0026	.44	.022	.0000	.50	1.50	.71	2294
Jan. 28.....	sl.	sl.	.35	4.85	1.25	3.60	.0038	.0136	.0128	.0008	.44	.024	.0001	.48	1.43	.70	1332
Feb. 11.....	dist.	sl.	.31	4.85	1.50	3.35	.0034	.0132	.0110	.0022	.42	.027	.0002	.47	1.27	.65	555
Feb. 25.....	dist.	dist.	.30	5.15	1.35	3.80	.0046	.0172	.0124	.0048	.38	.021	.0002	.42	1.65	.83	1860
Mar. 10.....	dec.	dist.	.35	4.30	1.25	3.05	.0070	.0152	.0136	.0016	.31	.017	.0002	.42	1.43	.69	920
Mar. 24.....	sl.	dist.	.30	4.00	1.25	2.75	.0032	.0140	.0112	.0028	.32	.016	.0001	.40	1.43	.60	186
April 6.....	v. sl.	dec.	.30	3.50	1.10	2.40	.0040	.0154	.0122	.0032	.28	.025	.0000	.44	.95	.40	227
April 21.....	v. sl.	dist.	.37	3.60	1.35	2.25	.0016	.0162	.0122	.0040	.32	.014	.0000	.50	1.11	.42	113
May 5.....	sl.	dist.	.37	3.85	1.20	2.65	.0028	.0150	.0124	.0026	.31	.026	.0000	.50	1.19	.45	91
May 19.....	v. sl.	dist.	.45	3.80	1.50	2.30	.0016	.0176	.0138	.0038	.34	.022	.0000	.52	1.27	.53	50
June 9.....	sl.	sl.	.42	3.75	1.40	2.35	.0014	.0178	.0174	.0004	.36	.026	.0002	.48	.95	.62	162
June 23.....	sl.	dist.	.37	4.15	1.45	2.70	.0008	.0168	.0154	.0014	.39	.020	.0000	.45	.95	.70	Liq.
July 6.....	sl.	sl.	.35	4.35	1.55	2.80	.0016	.0182	.0160	.0022	.42	.026	.0000	.39	1.29	.80	131
July 21.....	sl.	dist.	.43	4.75	1.25	3.50	.0008	.0188	.0172	.0016	.44	.019	.0000	.42	1.56	.70	331
Aug. 4.....	sl.	sl.	.40	5.00	1.55	3.45	.0012	.0180	.0172	.0008	.45	.026	.0000	.38	1.63	.70	471
Aug. 25.....	v. sl.	dist.	.50	5.00	1.60	3.40	.0016	.0202	.0198	.0004	.44	.023	.0000	.59	1.27	.65	95
Sept. 8.....	sl.	sl.	.48	5.65	2.05	3.60	.0014	.0198	.0186	.0012	.46	.025	.0002	.49	1.69	.70	235
Sept. 22.....	dist.	dist.	.47	5.25	1.50	3.75	.0010	.0202	.0176	.0026	.44	.015	.0000	.61	1.43	.61	41
Oct. 5.....	sl.	dist.	.50	5.25	1.70	3.55	.0014	.0178	.0170	.0008	.50	.024	.0000	.56	1.56	.80	335
Oct. 20.....	sl.	sl.	.50	5.60	1.80	3.80	.0014	.0190	.0170	.0020	.50	.022	.0002	.55	1.69	.70	66
Nov. 10.....	sl.	sl.	.47	5.60	1.60	4.00	.0014	.0170	.0164	.0006	.55	.023	.0004	.53	1.27	.80	2311
Nov. 22.....	sl.	sl.	.53	5.25	1.70	3.55	.0012	.0170	.0148	.0022	.50	.022	.0002	.59	1.43	.75	Lost.
Dec. 8.....	dist.	sl.	.49	5.55	2.18	3.37	.0014	.0168	.0156	.0012	.53	.028	.0006	.56	1.56	.78	4339
Dec. 22.....	dist.	sl.	.42	5.65	1.80	3.85	.0010	.0162	.0140	.0022	.53	.029	.0006	.52	1.56	.76	8910
Yearly avg...	sl.	sl.	.41	4.75	1.50	3.25	.0023	.0170	.0150	.0020	.42	.023	.0001	.49	1.40	.65	1140

Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Providence, giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.				Bacteria per c. c.		
	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.	Oxygen Consumed.		Hardness.	Alkalinity.
						Total.	In Solution.	In Suspension.							
Pettaconsett—															
1900.....	.45	5.80	1.90	3.90	.0014	.0222	.0182	.0040	.46	.014	.0003	.56	1.45	1.00	3395
1901.....	.44	5.85	2.10	3.75	.0013	.0248	.0207	.0041	.42	.013	.0003	.67	1.40	.80	4032
1902.....	.42	5.05	1.75	3.30	.0022	.0230	.0192	.0038	.39	.012	.0002	.62	1.15	.65	6650
1903.....	.46	5.00	1.70	3.30	.0018	.0220	.0185	.0035	.36	.011	.0002	.65	1.20	.60	3700
1904.....	.46	5.30	1.90	3.40	.0027	.0226	.0183	.0043	.42	.019	.0003	.63	1.45	.65	3000
Washington—															
1900.....	.46	3.75	1.50	2.25	.0017	.0173	.0164	.0009	.28	.006	.0000	.55	.60	.60	1072
1901.....	.45	3.85	1.60	2.25	.0015	.0173	.0163	.0010	.28	.004	.0000	.59	.65	.50	792
1902.....	.43	3.55	1.40	2.15	.0020	.0170	.0162	.0008	.28	.005	.0002*	.55	.50	.40	633
1903.....	.47	3.55	1.30	2.25	.0020	.0164	.0150	.0014	.25	.004	.0000	.57	.55	.40	331
1904.....	.51	3.75	1.45	2.30	.0040	.0183	.0162	.0021	.29	.006	.0001	.59	.65	.45	846
Hope—															
1900.....	.39	3.60	1.40	2.20	.0007	.0155	.0142	.0013	.25	.007	.0000	.48	.70	.60	536
1901.....	.40	3.95	1.50	2.45	.0005	.0154	.0145	.0009	.26	.005	.0000	.53	.70	.50	694
1902.....	.41	3.55	1.40	2.15	.0011	.0165	.0155	.0010	.25	.006	.0000	.56	.55	.40	1235
1903.....	.41	3.50	1.30	2.20	.0013	.0152	.0139	.0013	.24	.005	.0000	.53	.60	.45	538
1904.....	.38	3.55	1.30	2.25	.0016	.0148	.0135	.0013	.27	.007	.0000	.48	.75	.50	834
Laboratory Tap—															
1900.....															
1901.....	.41	6.20	1.95	4.25	.0005	.0224	.0193	.0031	.49	.013	.0001	.57	1.70	.95	1600
1902.....	.39	4.80	1.55	3.25	.0013	.0179	.0154	.0025	.41	.013	.0000	.51	1.15	.65	615
1903.....	.40	4.45	1.35	3.10	.0014	.0157	.0139	.0018	.37	.011	.0001	.49	1.15	.65	565
1904.....	.41	4.75	1.50	3.25	.0023	.0170	.0150	.0020	.42	.023	.0001	.49	1.40	.65	1140

*All determinations 0 except one.

Pawtuxet Valley Water Supply.

Chemical and Bacteriological Examination of a Water Supply in the Pawtuxet Valley, controlled by the Pawtuxet Valley Water Company, the sample being taken in the village of Riverpoint.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.							
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.	Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
								Total.	In Solution.	In Suspension.							
Jan. 18.....	none.	v. sl.	.21	3.60	1.25	2.35	.0032	.0132	.0128	.0004	.39	.015	.0000	.23	1.43	1.15	2067
Feb. 8.....	v. sl.	v. sl.	.16	3.75	.80	2.95	.0038	.0108	.0104	.0004	.40	.021	.0001	.23	1.82	1.25	35
Mar. 7.....	v. sl.	sl.	.25	4.00	1.30	2.70	.0038	.0118	.0112	.0006	.35	.025	.0000	.30	1.43	1.02	3596
April 18.....	v. sl.	v. sl.	.25	2.80	1.15	1.65	.0008	.0114	.0100	.0014	.32	.022	.0000	.20	.95	.82	546
May 16.....	v. sl.	v. sl.	.25	3.40	1.20	2.20	.0014	.0158	.0136	.0022	.32	.022	.0000	.29	.95	.45	141
June 13.....	sl.	sl.	.25	4.60	1.65	2.95	.0010	.0194	.0150	.0044	.31	.011	.0000	.37	1.27	.91	510
July 18.....	sl.	v. sl.	.29	3.90	1.40	2.50	.0010	.0170	.0166	.0004	.34	.008	.0000	.31	1.43	1.20	302
Aug. 22.....	v. sl.	v. sl.	.30	3.80	1.20	2.60	.0008	.0158	.0154	.0004	.35	.009	.0000	.30	1.50	1.21	.....
Sept. 12.....	v. sl.	v. sl.	.25	3.50	1.50	2.00	.0022	.0152	.0152	.0000	.34	.006	.0000	.30	1.43	1.20	.....
Oct. 17.....	sl.	v. sl.	.25	3.80	1.25	2.55	.0008	.0148	.0136	.0012	.35	.008	.0000	.32	1.27	1.15	950
Nov. 14.....	v. sl.	v. sl.	.27	3.90	1.10	2.80	.0008	.0152	.0136	.0016	.37	.012	.0000	.27	1.27	1.10	405
Dec. 12.....	sl.	v. sl.	.26	4.10	1.20	2.90	.0012	.0146	.0130	.0016	.40	.007	.0000	.25	1.56	1.20	496
Yearly avg.....	v. sl.	v. sl.	.26	3.75	1.25	2.50	.0017	.0146	.0134	.0012	.35	.014	.0000	.29	1.35	1.05	904

Chemical and Bacteriological Examination of a Water Supply in the Pawtuxet Valley, taken from a supply known as Knight's Spring, or Fountain, the sample being taken in the village of Riverpoint

Jan. 18.....	0	0	.00	5.80	2.20	3.60	.0000	.0016	.....	.....	.72	.405	.0000	.00	1.76	.40	1
Feb. 8.....	0	0	.00	5.95	1.90	4.05	.0002	.0014	.....	.....	.64	.246	.0000	.02	1.82	.40	77
Mar. 7.....	0	0	.00	4.75	1.45	3.30	.0012	.0018	.....	.....	.57	.220	.0000	.01	2.08	.30	2170
April 18.....	0	0	.00	5.15	1.80	3.35	.0006	.0014	.....	.....	.70	.273	.0000	.00	1.95	.41	9
May 16.....	0	0	.00	6.90	3.10	3.80	.0000	.0024	.....	.....	.78	.370	.0000	.00	2.47	.50	33
June 13.....	0	0	.00	5.80	2.15	3.65	.0000	.0012	.....	.....	.67	.308	.0000	.00	2.21	.41	18
July 18.....	0	0	.00	6.20	2.55	3.65	.0000	.0014	.....	.....	.57	.264	.0000	.00	2.08	.50	47
Aug. 22.....	0	0	.00	6.00	2.25	3.75	.0000	.0012	.....	.....	.69	.352	.0000	.00	1.95	.50	119
Sept. 12.....	0	0	.00	6.55	2.75	3.80	.0000	.0006	.....	.....	.69	.352	.0000	.00	2.21	.45	.....
Oct. 17.....	0	0	.00	6.85	2.80	4.05	.0000	.0014	.....	.....	.74	.396	.0000	.00	2.21	.50	779
Nov. 14.....	0	0	.00	6.90	2.05	4.85	.0006	.0010	.....	.....	.80	.396	.0000	.00	2.08	.50	310
Dec. 12.....	0	0	.00	6.30	2.35	3.95	.0000	.0006	.....	.....	.79	.352	.0000	.00	1.95	.40	21
Yearly avg.....	none.	none.	.00	6.10	2.30	3.80	.0002	.0013	.....	.....	.70	.328	.0000	.00	2.05	.45	326

Pawtuxet Valley Water Supply.

Chemical and Bacteriological Examination of a Water Supply in the Pawtuxet Valley, controlled by the Coventry Water Company, the sample being taken in the village of Arctic Centre.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.							
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.		Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.	Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
									Total.	In Solution.	In Suspension.							
Jan. 18.....	0	0	.02	1.95	.80	1.15	.0020	.0090	.....	.....	.29	.003	.0000	.10	.32	.30	3
Feb. 7.....	0	0	.03	2.05	.45	1.60	.0030	.0080	.....	.....	.34	.003	.0000	.11	.48	.41	19
Mar. 7.....	0	v. sl.	.01	2.05	.90	1.15	.0014	.0070	.....	.....	.31	.002	.0000	.08	.40	.31	.....
April 18.....	v. sl.	v. sl.	.11	2.15	.65	1.50	.0008	.0160	.....	.....	.32	.005	.0000	.13	.95	.80	Lost.
May 16.....	v. sl.	v. sl.	.20	1.55	.50	1.05	.0008	.0074	.....	.....	.29	.006	.0000	.06	.48	.45	259
June 13.....	0	0	.06	2.30	.80	1.50	.0004	.0050	.....	.....	.29	.006	.0000	.07	.63	.32	119
July 18.....	v. sl.	0	.10	2.10	.80	1.30	.0002	.0066	.....	.....	.30	.005	.0000	.06	.48	.40	93
Aug. 22.....	0	0	.05	2.30	.55	1.75	.0006	.0058	.....	.....	.32	.005	.0001	.06	.79	.70	.....
Sept. 12.....	0	0	.65	1.95	.55	1.40	.0002	.0044	.....	.....	.30	.003	.0000	.05	.63	.50	.....
Oct. 17.....	0	0	.07	1.90	.45	1.50	.0002	.0060	.....	.....	.29	.001	.0000	.05	.48	.31	747
Nov. 14.....	0	0	* .16	2.15	.80	1.35	.0006	.0050	.....	.....	.29	.003	.0000	.04	.48	.35	1596
Dec. 12.....	0	0	* .11	1.50	.65	.85	.0002	.0052	.....	.....	.32	.002	.0000	.06	.32	.31	66
Yearly avg..	none.	none.	.08	2.00	.65	1.35	.0009	.0071	.....	.....	.31	.004	.0000	.07	.55	.45	362

*Iron.

East Greenwich Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the town of East Greenwich,
the sample being taken from the tap in the office of the health officer.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 16.....	v. sl.	sl.	.40	4.30	1.20	3.10	.0014	.0126	.0110	.0016	.40	.012	.0000	.52	.95	.80	.....
Feb. 7.....	v. sl.	sl.	.26	3.65	.80	2.85	.0012	.0078	.0078	.0000	.36	.020	.0000	.29	.95	.80	1385
Mar. 13.....	v. sl.	v. sl.	.30	3.80	1.40	2.40	.0014	.0100	.0086	.0014	.35	.019	.0000	.35	1.11	.70	.....
April 18.....	0	v. sl.	.36	3.85	1.20	2.65	.0006	.0102	.0098	.0004	.36	.010	.0000	.45	1.11	.95	861
May 19.....	v. sl.	sl.	.45	4.60	1.45	3.15	.0008	.0130	.0104	.0026	.42	.015	.0000	.54	1.69	1.35	70
June 13.....	sl.	sl.	.84	5.10	2.05	3.05	.0008	.0172	.0166	.0006	.39	.021	.0000	.87	1.56	1.01	767
July 18.....	0	sl.	.34	5.00	1.60	3.40	.0008	.0092	.0090	.0002	.43	.033	.0000	.30	1.56	1.20	294
Aug. 20.....	sl.	sl.	.51	5.00	1.35	3.65	.0010	.0128	.0120	.0008	.45	.019	.0000	.53	1.43	1.35	.....
Sept. 25.....	sl.	sl.	.36	4.90	1.35	3.55	.0010	.0120	.0084	.0036	.46	.007	.0000	.30	1.69	1.60	Lost.
Oct. 16.....	v. sl.	v. sl.	.34	4.95	1.45	3.50	.0002	.0088	.0086	.0002	.46	.012	.0000	.31	1.82	1.51	1107
Nov. 13.....	0	tr.	.15	4.25	1.15	3.10	.0000	.0050	.0048	.0002	.45	.021	.0000	.18	1.56	1.35	109
Dec. 19.....	0	v. sl.	.21	4.45	1.60	2.85	.0008	.0056	.0048	.0008	.43	.018	.0000	.21	1.69	1.40	14
Yearly avg...	v. sl.	v. sl.	.38	4.50	1.40	3.10	.0008	.0103	.0093	.0010	.41	.017	.0000	.40	1.45	1.15	576

Woonsocket Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket
the sample being taken from the First Impounding Reservoir.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 18.....	sl.	v. sl.	.45	3.65	1.60	2.05	.0056	.0314	.0302	.0012	.32	.010	.0000	.57	.79	.40	66
Feb. 15.....	v. sl.	sl.	.38	3.45	1.80	1.65	.0046	.0218	.0206	.0012	.27	.010	.0000	.44	.70	.44	67
Mar. 21.....	dist.	sl.	.34	2.50	1.30	1.20	.0028	.0178	.0122	.0056	.21	.005	.0000	.46	.48	.30	907
April 18.....	v. sl.	v. sl.	.33	2.30	.95	1.35	.0014	.0194	.0160	.0034	.19	.003	.0000	.39	.55	.39	Lost.
May 23.....	sl.	sl.	.47	2.85	1.60	1.25	.0012	.0220	.0182	.0038	.22	.001	.0000	.53	.63	.35	277
June 24.....	dist.	dist.	.50	3.30	1.75	1.55	.0012	.0302	.0230	.0072	.21	.003	.0000	.56	.48	.40	681
July 25.....	dist.	sl.	.59	3.50	1.65	1.85	.0040	.0326	.0252	.0074	.25	.004	.0000	.63	.87	.40	178
Aug. 22.....	dist.	dec.	.51	3.25	1.55	1.70	.0018	.0358	.0248	.0110	.23	.002	.0000	.49	.63	.50	230
Sept. 20.....	dist.	dist.	.55	3.40	1.90	1.50	.0010	.0322	.0216	.0106	.24	.003	.0000	.51	.79	.40	6
Oct. 24.....	dec.	dist.	.43	3.50	1.85	1.65	.0016	.0360	.0270	.0090	.25	.003	.0000	.52	.79	.39	477
Nov. 21.....	sl.	sl.	.40	3.25	2.00	1.25	.0044	.0300	.0232	.0068	.26	.006	.0000	.44	.63	.50	Lost.
Dec. 20.....	sl.	sl.	.41	3.50	2.15	1.35	.0152	.0412	.0310	.0102	.34	.013	.0000	.57	.63	.55	3064
Yearly avg...	sl.	sl.	.45	3.20	1.65	1.55	.0037	.0292	.0228	.0064	.25	.005	.0000	.51	.65	.40	595

*Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket,
the sample being taken from the Pumping Station.*

Jan. 18.....	v. sl.	v. sl.	.45	3.95	1.55	2.40	.0054	.0196	.0182	.0014	.28	.015	.0000	.57	.79	.60	413
Feb. 15.....	v. sl.	sl.	.42	3.85	1.45	2.40	.0044	.0180	.0178	.0002	.31	.013	.0000	.54	.95	.70	547
Mar. 21.....	sl.	v. sl.	.37	2.80	1.30	1.50	.0016	.0144	.0132	.0012	.22	.005	.0000	.45	.63	.45	1689
April 18.....	v. sl.	v. sl.	.36	2.70	1.30	1.40	.0008	.0130	.0122	.0008	.22	.003	.0000	.46	.63	.50	404
May 23.....	v. sl.	v. sl.	.55	3.20	1.45	1.75	.0020	.0172	.0164	.0008	.24	.004	.0000	.58	.95	.60	262
June 24.....	sl.	sl.	.55	3.80	1.45	2.35	.0052	.0238	.0196	.0042	.25	.010	.0000	.58	.79	.70	307
July 25.....	dist.	sl.	.63	4.00	1.75	2.25	.0068	.0250	.0218	.0032	.27	.006	.0000	.59	1.11	.75	157
Aug. 22.....	dist.	sl.	.50	3.85	1.35	2.50	.0050	.0252	.0198	.0054	.27	.007	.0000	.53	.95	.80	1322
Sept. 20.....	dist.	dist.	.82	5.30	2.65	2.65	.0048	.0256	.0214	.0042	.31	.005	.0000	1.05	1.50	.50	2939
Oct. 24.....	dist.	sl.	.58	4.85	1.85	3.00	.0020	.0226	.0190	.0036	.42	.005	.0000	.75	1.50	.62	603
Nov. 21.....	v. sl.	v. sl.	.63	4.95	2.20	2.75	.0020	.0196	.0188	.0008	.41	.010	.0000	.76	.95	.50	122
Dec. 20.....	v. sl.	v. sl.	.40	4.10	1.60	2.50	.0034	.0164	.0164	.0000	.35	.015	.0000	.52	1.27	.70	400
Yearly avg...	sl.	sl.	.52	3.95	1.65	2.30	.0036	.0200	.0179	.0021	.30	.008	.0000	.62	1.00	.60	764

Woonsocket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket, the sample being taken from the tap in the office of the Superintendent of the Woonsocket Water Works.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 18.....	v. sl.	v. sl.	.45	3.80	1.45	2.35	.0044	.0184	.0176	.0008	.31	.013	.0000	.55	.79	.61	567
Feb. 15.....	v. sl.	v. sl.	.43	3.75	1.35	2.40	.0042	.0166	.0162	.0004	.31	.010	.0000	.53	.95	.69	1366
Mar. 21.....	sl.	v. sl.	.37	2.90	1.30	1.60	.0010	.0144	.0122	.0022	.23	.005	.0000	.45	.63	.35	668
April 18.....	v. sl.	v. sl.	.36	2.75	1.20	1.55	.0006	.0130	.0126	.0004	.23	.006	.0000	.47	.63	.50	Lost.
May 23.....	sl.	sl.	.62	3.70	1.80	1.90	.0016	.0214	.0186	.0028	.24	.004	.0000	.67	.95	.60	267
June 24.....	sl.	sl.	.53	3.85	1.60	2.25	.0016	.0188	.0172	.0016	.25	.010	.0000	.54	.79	.70	301
July 25.....	dist.	sl.	.59	4.00	1.75	2.25	.0020	.0248	.0194	.0054	.27	.007	.0000	.58	1.03	.70	208
Aug. 22.....	dist.	sl.	.46	3.75	1.50	2.25	.0040	.0232	.0182	.0050	.26	.007	.0001	.49	1.11	.80	665
Sept. 20.....	dist.	dist.	.74	5.50	2.55	2.95	.0018	.0286	.0240	.0046	.31	.005	.0000	.99	1.43	.50	842
Oct. 24.....	dist.	sl.	.55	4.65	1.85	2.80	.0032	.0216	.0186	.0030	.39	.007	.0000	.75	1.34	.62	93
Nov. 21.....	v. sl.	sl.	.64	4.80	1.95	2.85	.0014	.0210	.0182	.0028	.41	.009	.0000	.77	.95	.60	1670
Dec. 19.....	v. sl.	v. sl.	.40	3.25	1.75	1.50	.0036	.0154	.0142	.0012	.36	.016	.0000	.51	1.11	.65	89
Yearly avg...	sl.	sl.	.51	3.90	1.70	2.20	.0025	.0197	.0172	.0025	.30	.008	.0000	.61	1.00	.60	612

Woonsocket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Woonsocket, giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
						Total.	In Solution.	In Suspension.							
Reservoir 3—															
1900.....	.82	4.85	2.85	2.00	.0010	.0507	.0350	.0157	.24	.006	.0000	.96	.75	.65	603
1901.....	.58	4.15	2.35	1.80	.0034	.0469	.0317	.0152	.22	.004	.0000	.82	.60	.50	819
1902.....	.56	3.80	2.10	1.70	.0061	.0384	.0277	.0107	.23	.005	.0000	.71	.55	.40	1068
1903.....	.50	3.35	1.45	1.90	.0024	.0294	.0223	.0071	.22	.004	.0000	.61	.65	.45	232
1904.....	.45	3.20	1.65	1.55	.0037	.0292	.0228	.0064	.25	.005	.0000	.51	.65	.40	595
Pumping Station—															
1900.....	.72	4.70	2.25	2.45	.0017	.0311	.0256	.0055	.25	.008	.0000	.81	.85	.70	668
1901.....	.63	4.20	2.00	2.20	.0032	.0247	.0231	.0016	.24	.006	.0000	.77	.90	.55	882
1902.....	.59	4.35	1.75	2.60	.0034	.0252	.0222	.0030	.25	.009	.0000	.67	.80	.55	668
1903.....	.61	4.10	1.70	2.40	.0022	.0219	.0199	.0020	.28	.006	.0000	.74	1.00	.60	1431
1904.....	.52	3.95	1.65	2.30	.0036	.0200	.0179	.0021	.30	.008	.0000	.62	1.00	.60	764
Supt's Office—															
1900.....	.70	4.90	2.30	2.60	.0014	.0292	.0232	.0060	.24	.010	.0000	.77	.90	.75	370
1901.....	.64	4.65	2.10	2.55	.0017	.0277	.0226	.0051	.24	.007	.0000	.79	1.00	.60	1177
1902.....	.55	4.00	1.60	2.40	.0020	.0234	.0207	.0027	.25	.009	.0000	.63	.90	.55	1283
1903.....	.63	4.30	1.70	2.60	.0018	.0224	.0198	.0026	.27	.007	.0000	.76	1.00	.60	2067
1904.....	.51	3.90	1.70	2.20	.0025	.0197	.0172	.0025	.30	.008	.0000	.61	1.00	.60	612

Pawtucket Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket,
the Sample being taken from the tap in the Boiler Room of Pumping Station No. 3.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 25.....	v. sl.	sl.	.30	4.70	1.10	3.60	.0036	.0136	.0134	.0002	.39	.029	.0002	0.40	1.82	1.30	186
Feb. 23....	clay.	clay.	.40	6.60	1.05	5.55	.0084	.0156	.0136	.0020	.25	.018	.0002	0.43	1.56	.70	5456
Mar. 28.....		gr.	dec.														
Apr. 25.....	sl.	v. sl.	.30	3.40	1.25	2.15	.0020	.0140	.0136	.0004	.25	.010	.0000	0.39	1.35	.60	344
May 31.....	v. sl.	v. sl.	.25	3.60	1.20	2.40	.0022	.0114	.0106	.0008	.33	.012	.0000	0.30	1.27	.91	291
June 27.....	sl.	v. sl.	.26	4.20	1.35	2.85	.0024	.0128	.0120	.0008	.32	.018	.0000	0.31	1.43	1.20	51
July 25.....	v. sl.	v. sl.	.19	4.40	1.65	2.75	.0038	.0138	.0130	.0008	.33	.018	.0002	0.22	1.63	1.30	2817
Aug. 29.....	sl.	v. sl.	.25	4.10	1.10	3.00	.0018	.0124	.0124	.0000	.34	.009	.0000	0.25	1.43	.90	23
Sept. 26.....	v. sl.	v. sl.	.21	3.85	1.00	2.85	.0008	.0130	.0124	.0006	.34	.005	.0000	0.24	1.43	1.15	103
Oct. 24.....	v. sl.	0	.25	4.20	1.05	3.15	.0014	.0128	.0124	.0004	.34	.012	.0000	0.30	1.43	1.00	.....
Nov. 28.....	v. sl.	v. sl.	.18	3.60	.90	2.70	.0020	.0118	.0116	.0002	.37	.014	.0001	0.24	1.69	1.15	1984
Dec. 27.....	v. sl.	v. sl.	.21	3.80	1.00	2.80	.0016	.0116	.0106	.0010	.38	.018	.0000	0.26	1.43	1.00	146
Yearly avg...	v. sl.	tr.	.16	4.05	.95	3.10	.0016	.0090	.0088	.0002	.36	.024	.0000	0.18	1.82	1.20	4278
Yearly avg...	v. sl.	v. sl.	.25	4.20	1.15	3.05	.0026	.0126	.0120	.0006	.33	.016	.0001	0.29	1.50	1.05	1425

*Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket,
the Sample being taken from the Diamond Hill Reservoir.*

Jan. 25.....	v. sl.	sl.	.15	3.35	1.15	2.20	.0172	.0146	.0138	.0008	0.39	.023	.0002	0.35	1.11	.70	Liq.
Feb. 23.....	v. sl.	sl.	.25	3.85	1.00	2.85	.0064	.0228	.0204	.0024	0.43	.006	.0000	0.43	1.56	.85	144
Mar. 28.....	v. sl.	v. sl.	.29	2.85	1.00	1.85	.0030	.0178	.0148	.0030	0.27	.008	.0000	0.44	1.11	.50	218
Apr. 26.....	v. sl.	v. sl.	.30	2.65	1.00	1.65	.0010	.0170	.0140	.0030	0.27	.004	.0000	0.42	.79	.50	45
May 31.....	sl.	sl.	.31	3.35	1.45	1.90	.0018	.0184	.0160	.0024	0.27	.003	.0000	0.54	.79	.55	23
June 28.....	v. sl.	v. sl.	.25	3.65	1.65	2.00	.0018	.0158	.0142	.0016	0.27	.002	.0000	0.42	1.11	.60	52
July 25.....	v. sl.	sl.	.22	2.95	1.05	1.90	.0022	.0196	.0172	.0024	0.30	.001	.0000	0.40	0.95	.55	480
Aug. 29.....	sl.	sl.	.22	3.10	1.30	1.80	.0010	.0186	.0150	.0036	0.28	.002	.0000	0.39	0.95	.45	272
Sept. 26.....	0	sl.	.20	3.10	1.55	1.55	.0008	.0174	.0130	.0044	0.29	.001	.0000	0.36	.95	.55	12
Oct. 24.....	dist.	v. sl.	.17	3.25	1.30	1.95	.0020	.0228	.0192	.0036	0.30	.000	.0000	0.30	1.27	.59	37
Nov. 29.....	v. sl.	v. sl.	.21	3.20	1.00	2.20	.0034	.0212	.0178	.0034	0.37	.003	.0000	0.32	1.11	.51	799
Dec. 26.....	v. sl.	v. sl.	.20	3.80	1.35	2.45	.0044	.0238	.0216	.0022	0.41	.002	.0000	0.36	.95	.90	53
Yearly avg...	v. sl.	v. sl.	.23	3.25	1.25	2.00	.0038	.0191	.0164	.0027	0.32	.005	.0000	0.39	1.05	.60	194

Pawtucket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket, the Sample being taken from Snecch Pond Brook, a small stream entering the Abbott Run.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 25.....	v. sl.	sl.	.45	5.40	1.40	4.00	.0038	.0156	.0144	.0012	0.40	.016	.0000	.64	1.82	1.60	1920
Feb. 23.....	v. sl.	sl.	.32	3.80	1.25	2.55	.0022	.0154	.0130	.0024	0.22	.003	.0000	.51	1.19	.70	Liq.
Mar. 28.....	v. sl.	v. sl.	.44	3.45	1.20	2.25	.0010	.0162	.0134	.0028	0.26	.004	.0000	.58	1.27	.81	412
April 26.....	sl.	v. sl.	.32	3.75	1.40	2.35	.0016	.0114	.0108	.0006	0.30	.004	.0000	.39	1.50	1.19	130
May 31.....	v. sl.	sl.	.39	4.60	1.50	3.10	.0022	.0154	.0140	.0014	0.29	.016	.0000	.46	1.82	1.45	4120
June 28.....	sl.	sl.	.26	4.95	1.40	3.55	.0038	.0120	.0102	.0018	0.33	.015	.0002	.22	1.82	1.70	371
July 25.....	sl.	dec.	.35	4.85	1.30	3.55	.0038	.0174	.0128	.0046	0.38	.010	.0002	.28	1.95	1.72	3801
Aug. 29.....	sl.	sl.	.20	4.45	1.15	3.30	.0006	.0074	.0068	.0006	0.27	.006	.0000	.17	2.08	1.70	2924
Sept. 26.....	v. sl.	sl.	.20	4.95	1.35	3.60	.0004	.0102	.0082	.0020	0.36	.008	.0000	.25	2.21	1.65	Lost.
Oct. 24.....	sl.	sl.	.42	5.85	2.05	3.80	.0018	.0172	.0156	.0016	0.52	.007	.0000	.55	1.95	1.25	1123
Nov. 29.....	v. sl.	0	.20	5.60	1.45	4.15	.0014	.0098	.0098	.0000	0.41	.018	.0000	.24	2.08	1.40	Liq.
Dec. 26.....	0	v. sl.	.30	4.35	1.30	3.05	.0012	.0110	.0110	.0000	0.38	.015	.0000	.35	2.08	1.50	135
Yearly avg...	v. sl.	sl.	.32	4.65	1.40	3.25	.0020	.0133	.0117	.0016	0.34	.010	.0000	.39	1.80	1.40	1659

Pawtucket Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Pawtucket, giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
		Total.	Loss on Ignition.		Free.	Albuminoid.			Chlorine.	As Nitrates.						
			Loss	Fixed.		Total.	In Solution.	In Suspension.		As Nitrates.	As Nitrites.					
Tap in Boiler Room—																
1900.....	.31	4.10	1.30	2.80	.0012	.0130	.0121	.0009	.29	.009	.0000	.33	1.35	1.00	815	
1901.....	.31	4.15	1.35	2.80	.0008	.0139	.0136	.0003	.32	.009	.0000	.36	1.40	.95	3547	
1902.....	.22	3.80	1.20	2.60	.0016	.0126	.0120	.0006	.32	.011	.0000	.30	1.35	.90	526	
1903.....	.29	4.15	1.15	3.00	.0030	.0125	.0120	.0005	.31	.010	.0000	.33	1.45	1.00	1297	
1904.....	.25	4.20	1.15	3.05	.0026	.0126	.0120	.0006	.33	.016	.0001	.29	1.50	1.05	1425	
Diamond Hill Reservoir—																
1904.....	.23	3.25	1.25	2.00	.0038	.0191	.0164	.0027	.32	.005	.0000	.39	1.05	.60	194	
Sneech Pond Brook—																
1904.....	.32	4.65	1.40	3.25	.0020	.0133	.0117	.0016	.34	.010	.0000	.39	1.80	1.40	1659	

Bristol and Warren Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Towns of Bristol and Warren, the Sample being taken from the Kickemuit River, at the Pumping Station of the Bristol and Warren Water Works.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON' EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 4.....	sl.	dec.	.72	7.00	2.40	4.60	.0050	.0322	.0284	.0038	1.12	.012	.0000	1.07	2.21	.95	887
Feb. 1.....	dist.	dec.	.84	6.45	2.70	3.75	.0036	.0264	.0230	.0034	0.73	.011	.0000	1.17	1.82	.48	4907
Feb. 29.....	dist.	sl.	.74	5.40	2.15	3.25	.0016	.0216	.0184	.0032	0.57	.011	.0000	1.00	1.56	.50	12028
April 4.....	dist.	dec.	.82	6.15	2.75	3.40	.0040	.0360	.0338	.0022	0.57	.012	.0000	1.19	1.56	.30	4744
May 2.....	sl.	dist.	1.00	5.10	2.80	2.30	.0024	.0288	.0246	.0042	0.42	.008	.0000	1.22	1.43	.39	1539
June 1.....	dec.	dec.	1.50	6.80	3.50	3.30	.0080	.0418	.0402	.0016	0.63	.010	.0002	1.71	1.69	.90	9058
July 6.....	dec.	hea.	1.45	7.75	3.55	4.20	.0042	.0566	.0404	.0162	0.87	.008	.0002	1.47	1.56	1.20	2004
Aug. 1.....	dec.	sl.	1.04	7.40	2.90	4.50	.0070	.0486	.0446	.0040	1.17	.008	.0001	1.28	1.69	1.20	68200
Sept. 6.....	dec.	dist.	.94	5.30	3.10	2.20	.0036	.0402	.0358	.0044	0.94	.004	.0006	1.14	2.34	1.10	13296
Oct. 3.....	dist.	dec.	.84	7.75	2.95	4.80	.0036	.0412	.0360	.0052	1.39	.004	.0000	1.03	2.08	1.15	12400
Nov. 1.....	dist.	dist.	.74	7.80	2.50	5.30	.0026	.0414	.0338	.0076	1.51	.001	.0000	0.98	2.08	1.40	29264
Dec. 5.....	dec.	hea.	.90	10.85	4.00	6.85	.0066	.0512	.0312	.0200	1.57	.013	.0000	1.24	2.28	.90	Liq.
Yearly avg...	dist.	dec.	.96	7.00	2.95	4.05	.0044	.0388	.0325	.0063	0.96	.009	.0001	1.21	1.85	.85	14393

Chemical and Bacteriological Examination of the Water Supply of the Towns of Bristol and Warren, the Sample being taken from the Tap in the Office of the Town Clerk of Bristol.

Jan. 4.....	sl.	dec.	.72	7.35	2.65	4.70	.0038	.0288	.0284	.0004	1.12	.014	.0000	1.02	2.34	1.11	140
Feb. 1.....	sl.	dec.	.82	6.40	2.45	3.95	.0032	.0248	.0224	.0024	.75	.010	.0000	1.24	2.08	.75	742
Feb. 29.....	dist.	sl.	.76	5.70	2.35	3.35	.0014	.0238	.0192	.0046	.57	.011	.0000	1.05	1.69	.55	11718
April 4.....	dist.	dec.	.76	6.10	2.45	3.65	.0040	.0298	.0280	.0018	.58	.021	.0000	1.10	1.69	.60	267
May 2.....	sl.	dist.	.98	5.40	2.55	2.85	.0028	.0280	.0218	.0062	.42	.016	.0000	1.12	1.43	.80	1893
June 1.....	dec.	hea.	1.50	7.45	3.85	3.60	.0044	.0448	.0376	.0072	.65	.020	.0004	1.73	1.76	1.01	655
July 7.....	dec.	hea.	1.25	7.45	3.25	4.20	.0038	.0464	.0404	.0060	.87	.008	.0002	1.30	1.82	1.40	487
Aug. 1.....	dec.	dist.	1.08	8.20	3.25	4.95	.0044	.0452	.0436	.0016	1.15	.015	.0001	1.19	2.47	1.40	9066
Sept. 6.....	dec.	hea.	.94	12.35	4.75	7.60	.0032	.0786	.0362	.0424	.95	.012	.0006	1.63	2.47	1.25	6942
Oct. 3.....	dist.	hea.	.86	9.55	3.60	5.95	.0026	.0574	.0346	.0228	1.39	.010	.0000	1.11	2.21	1.20	29188
Nov. 1.....	dist.	dec.	.74	8.25	3.15	5.10	.0024	.0406	.0390	.0016	1.51	.007	.0000	0.98	2.21	1.40	54478
Dec. 5.....	dec.	hea.	.90	10.15	3.90	6.25	.0056	.0594	.0278	.0316	1.58	.015	.0000	1.23	2.34	.95	632
Yearly avg...	dist.	dec.	.94	7.85	3.20	4.65	.0035	.0423	.0316	.0107	.96	.013	.0001	1.23	2.05	1.05	11620

Bristol and Warren Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Towns of Bristol and Warren, giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPORA- TION.			Free.	AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
		Total.	Loss on Ignition.	Fixed.		Total.	Albuminoid.			As Nitrates.	As Nitrites.				
							In Solution.	In Suspension.							
Pumping Station—															
1900.....	.99	11.25	4.00	7.25	.0035	.0439	.0356	.0083	3.00	.007	.0000	1.16	2.30	1.05	1764
1901.....	.81	9.30	3.15	6.15	.0029	.0358	.0323	.0035	2.04	.007	.0000	1.11	2.20	.85	2273
1902.....	.74	10.75	3.60	7.15	.0029	.0349	.0322	.0027	2.82	.008	.0000	1.02	2.30	.85	12052
1903.....	.85	7.00	2.50	4.50	.0044	.0341	.0310	.0031	1.04	.007	.0001	1.09	1.90	.90	3395
1904.....	.96	7.00	2.95	4.05	.0044	.0388	.0325	.0063	0.96	.009	.0001	1.21	1.85	.85	14393
Town Clerk's Office—															
1900*.....	.96	24.75	5.10	19.65	.0016	.0376	.0325	.0051	9.54	.011	.0000	1.07	3.75	1.15	13014
1901.....	.79	9.40	3.05	6.35	.0012	.0341	.0304	.0037	2.03	.008	.0000	1.06	2.35	.95	4528
1902.....	.74	11.20	3.40	7.80	.0021	.0352	.0309	.0043	2.90	.010	.0000	1.01	2.40	.95	9798
1903.....	.84	7.60	2.65	4.95	.0038	.0367	.0295	.0072	1.06	.011	.0001	1.10	2.05	1.05	2987
1904.....	.94	7.85	3.20	4.65	.0035	.0423	.0316	.0107	0.96	.013	.0001	1.23	2.05	1.05	11620

* One sample was very high in "salt water."

Narragansett Pier Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the District of Narragansett,
the Sample being taken from Rocky Brook, at the Pumping Station.*

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.							Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.	Oxygen Consumed.	Hardness.	Alkalinity.		
								Total.	In Solution.	In Suspension.								
Jan. 25.....	sl.	sl.	.72	5.45	1.90	3.55	.0056	.0180	.0166	.0014	.70	.024	.0000	0.78	1.27	.65	3492	
Feb. 23.....	v. sl.	v. sl.	.20	4.10	.65	3.45	.0012	.0060	.0054	.0006	.50	.008	.0000	0.26	.79	.71	335	
Mar. 22.....	v. sl.	v. sl.	.50	3.40	1.30	2.10	.0020	.0174	.0148	.0026	.48	.014	.0000	0.61	.63	.35	448	
April 26.....	sl.	sl.	.80	4.25	1.95	2.30	.0024	.0192	.0178	.0014	.53	.012	.0000	0.82	.95	.41	Lost.	
May 23.....	sl.	v. sl.	1.22	4.80	2.70	2.10	.0048	.0244	.0230	.0014	.55	.013	.0000	1.28	.95	.40	1313	
July 5.....	sl.	v. sl.	1.18	4.80	2.70	2.10	.0032	.0290	.0268	.0022	.58	.003	.0000	1.16	.95	.55	167	
July 27.....	sl.	sl.	.90	4.95	1.70	3.25	.0020	.0252	.0214	.0038	.62	.005	.0000	.88	1.27	.55	856	
Sept. 6.....	sl.	dist.	1.00	6.15	2.35	3.80	.0024	.0288	.0244	.0044	.65	.003	.0000	.99	1.56	1.20	377	
Sept. 26.....	v. sl.	v. sl.	.70	4.60	1.75	2.85	.0024	.0204	.0180	.0024	.66	.004	.0000	.71	.95	.60	66	
Oct. 24.....	dist.	sl.	.74	4.75	1.65	3.10	.0020	.0178	.0174	.0004	.76	.005	.0000	.78	.79	.57	.....
Nov. 21.....	sl.	v. sl.	.73	5.80	2.30	3.50	.0024	.0194	.0186	.0008	.75	.008	.0000	.78	.79	.45	Lost.	
Dec. 29.....	sl.	v. sl.	.88	5.25	2.50	2.75	.0054	.0184	.0158	.0026	.64	.018	.0000	.96	1.11	.51	8866	
Yearly avg...	sl.	v. sl.	.80	4.85	1.95	2.90	.0030	.0203	.0183	.0020	.61	.010	.0000	.83	.90	.55	1769	

Narragansett Pier Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the District of Narragansett, the Sample being taken from the Tap in the Office of the Water Company.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 26.....	sl.	sl.	.70	5.80	2.00	3.80	.0024	.0166	.0156	.0010	.72	.029	.0000	0.78	1.27	.65	711
Feb. 23.....	sl.	sl.	.40	9.35	2.40	6.95	.0048	.0206	.0152	.0054	.57	.024	.0000	0.68	.....	.....	1701
Mar. 22.....	v. sl.	v. sl.	.50	3.50	1.25	2.25	.0022	.0146	.0128	.0018	.49	.017	.0000	0.65	.63	.35	33
April 26.....	sl.	sl.	.76	4.30	1.80	2.50	.0016	.0182	.0172	.0010	.55	.012	.0000	0.80	1.03	.41	2314
May 23.....	v. sl.	v. sl.	1.14	4.80	2.55	2.25	.0024	.0220	.0202	.0018	.55	.014	.0000	1.20	.95	.40	297
July 5.....	sl.	v. sl.	1.20	4.80	2.55	2.25	.0020	.0274	.0242	.0032	.59	.008	.0000	1.13	.95	.55	.....
July 27.....	sl.	sl.	.90	5.15	2.15	3.00	.0012	.0212	.0198	.0014	.60	.010	.0000	.79	1.27	.55	9176
Sept. 6.....	sl.	sl.	.90	4.60	1.70	2.90	.0016	.0212	.0206	.0006	.63	.006	.0000	.85	1.11	.62	678
Sept. 26.....	v. sl.	v. sl.	.70	4.45	1.75	2.70	.0016	.0170	.0156	.0014	.66	.008	.0000	.71	.95	.60	149
Oct. 24.....	dist.	v. sl.	.72	5.10	2.00	3.10	.0010	.0170	.0168	.0002	.73	.005	.0000	.74	1.11	.70	Lost.
Nov. 22.....	sl.	sl.	.76	4.55	1.75	2.80	.0022	.0210	.0192	.0018	.78	.010	.0000	.82	.79	.45	Lost.
Dec. 29.....	sl.	tr.	.80	5.40	2.10	3.30	.0044	.0162	.0144	.0018	.65	.020	.0000	.86	1.11	.51	5766
Yearly avg...	sl.	v. sl.	.79	5.15	2.00	3.15	.0023	.0194	.0176	.0018	.62	.014	.0000	.83	1.00	.55	2314

Chemical and Bacteriological Examination of a Water Supply in the District of Narragansett, taken from a Supply known as the Gladstone Spring, the same being Located at Narragansett Pier.

June 27.....	0	0	.00	6.60	1.70	4.90	.0000	.0012	.....	.....	1.34	.130	.0000	.00	2.21	1.12	3
July 25.....	0	0	.00	7.20	1.65	5.55	.0000	.0003	.....	.....	1.34	.149	.0000	.00	2.21	1.20	4
Aug. 31.....	0	0	.00	8.35	1.65	6.70	.0004	.0010	.....	.....	1.34	.142	.0000	.00	2.60	1.55	153
Sept. 26.....	0	0	.00	4.10	.90	3.26	.0000	.0014	.....	.....	1.28	.126	.0000	.00	2.08	1.15	43
Yearly avg...	0	0	.00	6.55	1.45	5.10	.0001	.0011	.....	.....	1.30	.137	.0000	.00	2.30	1.25	51

Narragansett Pier Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the District of Narragansett.
Giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of
the Water at Different Points of the Supply.*

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
						Total.	In Solution.	In Suspension.							
Narragansett Pier, Pumping Station—															
1900.....	.92	5.10	2.00	3.10	.0022	.0256	.0205	.0051	.60	.006	.0000	.88	.80	.70	1536
1901.....	.85	5.35	2.25	3.10	.0022	.0257	.0223	.0034	.57	.006	.0000	.94	.90	.50	1017
1902.....	.75	4.90	1.70	3.20	.0029	.0210	.0191	.0019	.59	.010	.0000	.76	.80	.45	1722
1903.....	.83	4.75	1.70	3.05	.0030	.0199	.0181	.0018	.60	.009	.0000	.82	.80	.45	1887
1904.....	.80	4.85	1.95	2.90	.0030	.0203	.0183	.0020	.61	.010	.0000	.83	.90	.55	1769
Narragansett Pier, Office Water Co.—															
1900.....	.87	5.00	1.90	3.10	.0007	.0196	.0166	.0030	.60	.007	.0000	.77	.85	.70	1652
1901.....	.88	5.40	2.20	3.20	.0005	.0205	.0188	.0017	.59	.007	.0000	.87	1.15	.70	1505
1902.....	.76	4.90	1.80	3.10	.0011	.0187	.0174	.0013	.61	.012	.0000	.73	.85	.45	646
1903.....	.80	4.85	1.65	3.20	.0014	.0187	.0168	.0019	.60	.010	.0000	.77	.85	.50	1372
1904.....	.79	5.15	2.00	3.15	.0023	.0194	.0176	.0018	.62	.014	.0000	.83	1.00	.55	2314
Narragansett Pier, Gladstone Spring—															
1901.....	.00	6.85	1.35	5.50	.0000	.0012	.....	.....	1.02	.086	.0000	.00	1.95	1.25	.....
1902.....	.00	7.10	1.50	5.60	.0003	.0015	.....	.....	1.21	.093	.0000	.02	2.20	.95	94
1903.....	.00	7.25	1.55	5.70	.0002	.0010	.....	.....	1.24	.149	.0000	.00	2.10	1.10	126
1904.....	.00	6.55	1.45	5.10	.0001	.0011	.....	.....	1.30	.137	.0000	.00	2.30	1.25	51

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, the Sample being taken from the South Reservoir at the Intake.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.		
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.	
								Total.	In Solution.	In Suspension.								
Jan. 7.....	dec.	v. sl.	.29	9.90	2.50	7.40	.0226	.0518	.0380	.0138	1.98	.042	.0004	.75	3.25	2.15	220	
Feb. 8.....	sl.	sl.	.30	7.05	2.10	4.95	.0352	.0344	.0280	.0064	1.55	.069	.0010	.53	2.19	1.70	18166	
Mar. 8.....	dec.	dec.	.32	7.70	2.55	5.15	.0220	.0438	.0298	.0140	1.50	.027	.0002	.63	2.93	1.70	613	
April 11.....	dist.	dist.	.25	7.05	2.45	4.60	.0082	.0506	.0336	.0170	1.20	.037	.0006	.56	2.21	....	1364
May 9.....	dec.	dec.	.30	8.00	3.20	4.80	.0140	.0634	.0336	.0298	1.35	.012	.0006	.59	2.47	1.55	2304	
June 6.....	dec.	dec.	.33	8.70	3.30	5.40	.0266	.0488	.0328	.0160	1.30	.044	.0024	.67	2.73	1.90	3598	
July 11.....	dist.	dec.	.25	8.75	3.50	5.35	.0060	.0654	.0394	.0260	1.48	.005	.0002	.64	2.86	2.30	344	
Aug. 1.....	{	dec.	dec.	*.45 †.23	9.20	3.35	5.85	.0060	.0736	.0408	.0328	1.50	.003	.0000	.62	2.47	1.70	1271
Sept. 12.....		dec.	dist.	.20	9.25	3.65	5.60	.0028	.0540	.0402	.0138	1.79	.003	.0000	.62	2.86	2.00	565
Oct. 10.....		sl.	dist.	.20	9.35	3.30	6.05	.0034	.0544	.0408	.0136	1.96	.002	.0000	.54	2.73	2.00	273
Nov. 1.....	{	dist.	sl.	*.27 †.22	7.00	1.45	5.55	.0032	.0574	.0408	.0166	2.02	.002	.0000	.56	3.12	2.05	94
Dec. 5.....		sl.	sl.	.26	9.40	3.50	5.90	.0156	.0464	.0392	.0072	2.10	.020	.0002	.51	2.86	1.85	31
Yearly avg...	dec.	cons.	.29	8.45	2.90	5.55	.0138	.0536	.0364	.0172	1.64	.022	.0005	.60	2.70	1.75	2403	

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, the Sample being taken from the Tap in the Cottage of the Engineer of the Newport Water Works.

Jan. 7.	dec.	v. sl.	.25	10.85	2.65	8.20	.0198	.0490	.0366	.0124	2.25	.042	.0004	.70	3.38	2.30	127
Feb. 8.	sl.	v. sl.	.25	8.05	2.35	5.70	.0312	.0278	.0252	.0026	1.65	.095	.0012	.47	3.25	1.60	6975
Mar. 8.	dec.	v. sl.	.29	8.60	2.60	6.00	.0252	.0370	.0260	.0110	1.75	.052	.0006	.53	3.06	1.80	3332
April 11.	sl.	sl.	.23	8.40	2.35	6.05	.0214	.0346	.0276	.0070	1.75	.059	.0010	.38	2.99	....	1922
May 9.	dist.	sl.	.26	8.70	3.35	5.35	.0152	.0350	.0284	.0066	1.90	.043	.0002	.42	2.99	1.80	1106
June 6.	dec.	sl.	.30	9.10	3.15	5.95	.0074	.0296	.0260	.0036	1.83	.078	.0006	.49	3.12	2.05	3496
July 11.	dist.	sl.	.32	9.00	2.65	6.35	.0182	.0394	.0292	.0102	1.88	.021	.0002	.48	2.99	2.50	839
Aug. 1.	dec.	hea.	*.46 †.23	11.00	3.00	8.00	.0306	.0514	.0340	.0170	2.28	.033	.0008	.55	3.77	2.80	19100
Sept. 12.	dist.	sl.	.21	9.75	2.55	7.20	.0050	.0402	.0350	.0052	2.00	.018	.0000	.46	3.38	2.35	5456
Oct. 10.	sl.	sl.	.20	8.80	2.70	6.10	.0060	.0400	.0360	.0040	2.04	.011	.0000	.45	3.12	2.18	124
Nov. 1.	dist.	sl.	*.24 †.21	9.70	3.30	6.40	.0094	.0420	.0370	.0050	2.08	.013	.0001	.50	3.38	2.20	7750
Dec. 5.	v. sl.	v. sl.	.25	9.60	3.35	6.25	.0162	.0416	.0374	.0042	2.15	.026	.0002	.42	2.99	1.95	212
Yearly avg...	dec.	sl.	.27	9.30	2.85	6.45	.0171	.0390	.0316	.0074	1.96	.041	.0004	.49	3.20	2.15	4203

* Unfiltered. † Filtered.

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, the Sample being taken from the Tap in the Office of the Board of Health of the City of Newport.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 5.	dec.	dec.	.27	10.50	2.20	8.30	.0168	.0558	.0366	.0192	2.30	.049	.0006	.68	3.38	2.15	11718
Feb. 8.	sl.	v. sl.	.25	7.90	2.15	5.75	.0238	.0282	.0258	.0024	1.70	.086	.0016	.51	3.12	1.60	1527
Mar. 7.	dist.	sl.	.30	8.50	2.05	6.45	.0064	.0416	.0276	.0140	1.65	.062	.0002	.53	3.25	2.00	601
April 11.	sl.	v. sl.	.20	7.75	2.55	5.20	.0054	.0340	.0262	.0078	1.55	.060	.0004	.38	2.47	....	625
May 10.	v. sl.	v. sl.	.25	8.40	2.35	6.05	.0042	.0294	.0262	.0032	1.78	.060	.0002	.38	2.86	1.79	478
June 6.	sl.	dec.	.24	9.50	3.10	6.40	.0158	.0298	.0238	.0060	1.70	.010	.0014	.39	3.64	2.80	159
July 11.	dist.	sl.	.25	8.80	2.50	6.30	.0024	.0352	.0264	.0088	1.93	.031	.0002	.40	2.99	2.40	257
Aug. 1.	dist.	dist.	.31	11.15	3.40	7.75	.0040	.0366	.0302	.0064	2.23	.037	.0002	.40	3.64	2.45	909
Sept. 13.	dist.	sl.	.26	9.75	3.25	6.50	.0012	.0324	.0306	.0018	2.06	.037	.0000	.43	3.38	2.40	7
Oct. 10.	sl.	sl.	.20	8.45	2.90	5.55	.0030	.0352	.0346	.0006	1.83	.025	.0000	.38	2.86	1.95	45
Nov. 2.	sl.	sl.	.22	8.40	2.90	5.50	.0012	.0388	.0324	.0064	1.92	.024	.0000	.41	2.73	1.80	26
Dec. 5.	sl.	v. sl.	.27	9.25	2.95	6.30	.0154	.0402	.0348	.0054	2.00	.027	.0002	.39	2.99	1.95	761
Yearly avg. . .	sl.	sl.	.25	9.05	2.70	6.35	.0083	.0364	.0296	.0068	1.88	.042	.0004	.44	3.10	2.10	1426

Newport Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the City of Newport, giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of the Water at Different Points of the Supply.

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
		Total.	Loss on Ignition.	Fixed.	Free.	Total.	In Solution.		In Suspension.	As Nitrates.					As Nitrites.
Newport, Intake—															
1900.....	.39	9.50	3.15	6.35	.0056	.0560	.0372	.0188	1.80	.009	.0001	.66	2.60	2.10	1235
1901.....	.30	9.10	3.35	5.75	.0230	.0540	.0405	.0135	1.57	.019	.0004	.65	2.70	1.90	1820
1902.....	.26	8.55	2.95	5.60	.0045	.0525	.0387	.0138	1.58	.033	.0002	.64	2.60	1.75	1547
1903.....	.30	8.85	2.90	5.95	.0146	.0537	.0373	.0164	1.46	.029	.0004	.68	2.75	1.80	1613
1904.....	.29	8.45	2.90	5.55	.0138	.0536	.0364	.0172	1.64	.022	.0005	.60	2.70	1.75	2403
Newport, Eng. Cottage—															
1900.....	.25	9.70	2.90	6.80	.0059	.0387	.0329	.0058	2.08	.012	.0001	.49	2.95	2.10	1755
1901.....	.25	9.30	2.95	6.35	.0208	.0383	.0338	.0045	1.75	.027	.0001	.51	2.95	1.95	6162*
1902.....	.24	9.00	2.75	6.25	.0102	.0406	.0344	.0062	1.79	.042	.0001	.56	2.80	1.80	1236
1903.....	.26	9.65	2.70	6.95	.0211	.0379	.0315	.0064	1.95	.047	.0004	.52	3.25	2.15	2886
1904.....	.27	9.30	2.85	6.45	.0171	.0390	.0316	.0074	1.96	.041	.0004	.49	3.20	2.15	4203
Newport, Board of Health—															
1900.....	.23	10.55	3.45	7.10	.0055	.0489	.0413	.0076	2.02	.015	.0000	.58	2.95	2.05	563
1901.....	.23	9.55	2.90	6.65	.0145	.0388	.0342	.0046	1.76	.029	.0002	.51	3.00	2.10	2428
1902.....	.24	9.70	2.90	6.80	.0054	.0432	.0308	.0124	1.85	.052	.0002	.55	2.95	1.90	1554
1903.....	.25	10.00	2.90	7.10	.0119	.0389	.0297	.0092	1.96	.051	.0005	.51	3.30	2.20	2734
1904.....	.25	9.05	2.70	6.35	.0083	.0364	.0296	.0068	1.88	.042	.0004	.44	3.10	2.10	1426

* Includes one high bacteria count.

Jamestown Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown,
the Sample being taken from the North Pumping Station.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.						
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.	Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
								Total.	In Solution.	In Suspension.							
Jan. 12.....	v. sl.	v. sl.	.64	9.40	2.95	6.45	.0160	.0270	.0262	.0008	1.64	.039	.0006	0.96	2.54	0.85	414
Feb. 8.....	sl.	sl.	.54	6.90	2.15	4.75	.0034	.0208	.0194	.0014	1.24	.025	.0000	0.82	1.82	0.70	487
March 6.....	dist.	sl.	.41	5.35	1.80	3.55	.0024	.0286	.0210	.0076	.74	.028	.0000	0.74	1.27	0.50	1678
April 11.....	dist.	sl.	.74	6.25	2.90	3.35	.0026	.0366	.0338	.0028	.88	.017	.0000	1.06	1.69	....	3740
May 10.....	dist.	sl.	.96	7.20	3.95	3.25	.0050	.0398	.0328	.0070	.88	.021	.0000	1.24	1.69	.80	2676
June 5.....	sl.	sl.	1.00	6.45	3.10	3.35	.0048	.0398	.0382	.0016	.92	.018	.0000	1.32	1.56	.85	.....
July 10.....	v. sl.	sl.	.90	6.55	2.75	3.80	.0040	.0362	.0346	.0016	.90	.023	.0000	1.00	1.69	1.32	Lost.
Aug. 22.....	sl.	dec.	.90	7.90	3.25	4.65	.0080	.0462	.0366	.0096	1.14	.012	.0000	1.19	1.95	1.15	.....
Sept. 13.....	sl.	v. sl.	.80	6.70	2.80	3.90	.0114	.0366	.0360	.0006	1.02	.013	.0000	0.86	2.21	1.20	8680
Oct. 9.....	sl.	dist.	.90	6.70	2.80	3.90	.0052	.0470	.0402	.0068	1.10	.010	.0000	0.90	1.69	.80	584
Nov. 7.....	sl.	sl.	.88	7.45	3.35	4.10	.0028	.0674	.0508	.0166	1.26	.007	.0000	0.88	1.43	.85	10
Dec. 12.....	sl.	v. sl.	.99	9.25	3.25	6.00	.0108	.0334	.0320	.0014	1.85	.026	.0000	1.09	2.47	.90	185
Yearly avg...	sl.	sl.	.72	7.20	2.95	4.25	.0064	.0383	.0335	.0048	1.13	.020	.0000	1.01	1.85	.90	2050

Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown
the Sample being taken from the South Pumping Station.

Feb. 8.....	0	0	.00	13.10	3.30	9.80	.0002	.0022	.0022	.0000	3.18	.476	.0000	.07	4.29	1.30	1962
Mar. 6.....	0	inorg. sl.	.00	12.60	3.45	9.15	.0002	.0030	.0030	.0000	3.43	.440	.0000	.03	4.36	1.30	7254
April 11.....	0	v. sl.	.05	12.45	4.25	8.20	.0006	.0040	.0040	.0000	2.80	.370	.0000	.10	3.90	....	2078
May 9.....	v. sl.	sl.	.21	10.40	3.50	6.60	.0022	.0166	.0166	.0000	2.08	.300	.0001	.45	3.38	1.30	9496
June 6.....	sl.	sl.	.24	11.00	3.75	7.25	.0044	.0196	.0146	.0050	2.03	.246	.0002	.55	3.38	2.00	5084
July 10.....	sl.	sl.	.23	12.40	4.50	7.90	.0058	.0176	.0148	.0028	3.05	.260	.0008	.45	3.90	2.00	2412
Aug. 22....	dist.	iron. dec.	.60	11.35	2.95	8.40	.0080	.0288	.0220	.0068	2.28	.132	.0004	.87	3.64	2.15	6500
Sept. 13.....	0	sl.	.20	10.30	4.25	6.05	.0024	.0144	.0132	.0012	2.86	.176	.0006	.38	4.16	2.10	2604
Oct. 9.....	0	0	.02	16.60	3.60	13.00	.0010	.0058	.0058	.0000	4.34	.528	.0001	.09	5.86	1.60	....
Nov. 7.....	0	0	.00	9.90	3.20	6.70	.0000	.0038	.0038	.0000	4.00	.440	.0000	.02	5.14	1.60	29
Dec. 12.....	0	0	.02	15.40	4.45	10.95	.0002	.0020	.0020	.0000	4.35	.387	.0000	.06	5.14	1.55	86
Yearly avg.	none to v. sl.	v. sl.	.14	12.30	3.75	8.55	.0023	.0107	.0093	.0014	3.13	.341	.0002	.28	4.30	1.55	3750

Jamestown Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown, the Sample being taken from the Tap in the store of J. Watson, Located on the Distal End of the Supply Pipes.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 12.....	v. sl.	sl.	.64	9.90	2.70	7.20	.0058	.0262	.0262	.0000	1.70	.043	.0002	.88	3.38	1.85	134
Feb. 8.....	sl.	sl.	.55	7.05	1.85	5.20	.0030	.0212	.0196	.0016	1.26	.031	.0000	.84	2.60	1.40	123
March 6.....	dist.	sl.	.40	6.55	1.80	4.75	.0014	.0204	.0160	.0044	0.87	.033	.0000	.62	2.34	1.70	95
April 19.....	sl.	v. sl.	.58	6.40	1.85	4.55	.0018	.0248	.0222	.0026	1.10	.025	.0000	.81	2.21	1.40	Lost
May 9.....	sl.	sl.	.80	6.00	2.60	3.40	.0026	.0354	.0310	.0044	.90	.021	.0000	1.11	1.69	1.05	6954
June 5.....	sl.	sl.	.96	6.50	3.05	3.45	.0032	.0378	.0354	.0024	.92	.019	.0000	1.31	1.69	.85	5394
July 10.....	v. sl.	sl.	1.04	6.75	3.00	3.75	.0032	.0414	.0390	.0024	.90	.020	.0000	1.07	1.82	1.40	.....
Aug. 22.....	sl.	dec.	.90	8.25	3.50	4.75	.0046	.0432	.0392	.0040	1.14	.012	.0000	1.13	2.34	1.70	2314
Sept. 13.....	sl.	v. sl.	.56	7.30	2.50	4.80	.0044	.0340	.0286	.0054	1.02	.005	.0006	.71	3.12	2.15	3286
Oct. 9.....	sl.	dist.	.88	7.10	2.65	4.45	.0036	.0476	.0400	.0076	1.12	.010	.0000	.83	1.69	.90	.....
Nov. 7.....	sl.	sl.	.80	7.75	2.60	5.15	.0018	.0562	.0444	.0118	1.26	.020	.0000	.72	2.08	1.60	4
*Dec. 12.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
Yearly avg...	sl.	sl.	.74	7.25	2.55	4.70	.0032	.0353	.0311	.0042	1.12	.022	.0001	.91	2.25	1.45	2036

* Bacteriological analysis only; sample for chemical analysis broken in transit

Jamestown Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Jamestown,
Giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of
the Water at Different Points of the Supply.*

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			Free.	AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
		Total.	Loss on Ignition.	Fixed.		Total.	Albuminoid.			As Nitrates.	As Nitrites.				
							In Solution.	In Suspension.							
Jamestown, No. Pump'g Sta'n—															
1900.....	.63	9.65	3.10	6.55	.0035	.0336	.0269	.0067	1.27	.071	.0001	.77	2.25	1.05	4794
1901.....	.86	8.25	3.45	4.80	.0035	.0441	.0409	.0032	1.32	.020	.0000	1.16	1.90	.90	2176
1902.....	.65	7.70	2.95	4.75	.0037	.0379	.0337	.0042	1.16	.046	.0001	.88	1.90	1.00	4131
1903.....	.81	7.00	2.50	4.50	.0069	.0394	.0344	.0050	1.07	.036	.0001	.94	1.75	.95	4835
1904.....	.72	7.20	2.95	4.25	.0064	.0383	.0335	.0048	1.13	.020	.0000	1.01	1.85	.90	2050
Jamestown, So. Pump'g Sta'n—															
1900.....	.03	10.25	2.95	7.30	.0001	.0030	.0029	.0001	2.02	.243	.0000	.05	3.50	1.50	842
1901.....	.08	12.40	4.10	8.30	.0006	.0067	.0063	.0004	2.29	.335	.0001	.14	4.00	1.30	925
1902.....	.02	13.40	3.80	9.60	.0007	.0034	.0034	.0000	2.95	.396	.0000	.08	4.30	1.25	6578
1903.....	.06	14.35	3.90	10.45	.0017	.0083	.0077	.0006	3.21	.386	.0002	.20	4.55	1.65	*
1904.....	.14	12.30	3.75	8.55	.0023	.0107	.0093	.0014	3.13	.341	.0002	.28	4.30	1.55	3750
Jamestown, Watson's Store—															
1900.....	.44	10.35	2.90	7.45	.0010	.0202	.0194	.0008	1.60	.105	.0000	.52	3.40	2.10	723
1901.....	.45	10.35	3.60	6.75	.0014	.0226	.0210	.0016	1.75	.177	.0001	.60	3.30	1.75	11016
1902.....	.52	9.80	3.25	6.55	.0015	.0303	.0263	.0040	1.57	.143	.0000	.70	2.75	1.50	1451
1903.....	.81	7.65	2.65	5.00	.0035	.0373	.0328	.0045	1.13	.038	.0002	.91	2.25	1.45	2662
1904.....	.74	7.25	2.55	4.70	.0032	.0353	.0311	.0042	1.12	.022	.0001	.91	2.25	1.45	2036

* Questionable.

Westerly Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of Westerly, the Sample being taken from the Pumping Station of the Westerly Water Works.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Jan. 5.....	0	0	.00	4.95	.75	4.20	.0000	.0010	.....	.....	.55	.061	.0000	.00	2.34	1.70	.....
Jan. 31.....	0	tr.	.00	4.85	.75	4.10	.0000	.0018	.....	.....	.55	.064	.0000	.02	1.89	1.60	10
Feb. 29.....	0	0	.00	4.90	.85	4.05	.0000	.0008	.....	.....	.56	.051	.0000	.00	2.34	1.60	7
April 7.....	0	0	.00	5.30	.90	4.40	.0002	.0014	.....	.....	.52	.060	.0000	.00	1.95	1.45	0
May 2.....	0	0	.00	4.80	1.10	3.70	.0000	.0010	.....	.....	.53	.068	.0000	.00	2.08	1.55	1
June 1.....	0	0	.00	4.95	1.05	3.90	.0000	.0016	.....	.....	.53	.074	.0000	.00	1.69	1.55	4
July 5.....	0	0	.00	5.05	1.00	4.05	.0002	.0010	.....	.....	.53	.071	.0000	.00	1.95	1.65	206
Aug. 1.....	0	0	.00	5.55	1.10	4.45	.0000	.0016	.....	.....	.55	.077	.0000	.00	2.08	1.55	.....
Sept. 1.....	0	0	.00	5.20	.70	4.50	.0002	.0018	.....	.....	.55	.078	.0000	.00	2.08	1.55	13
Oct. 3.....	0	0	.00	5.10	1.10	4.00	.0000	.0010	.....	.....	.54	.078	.0000	.00	2.21	1.60	13
Nov. 1.....	0	0	.00	4.95	1.05	3.90	.0000	.0008	.....	.....	.54	.077	.0000	.00	2.08	1.70	13
Dec. 5.....	0	0	.00	5.05	1.10	3.95	.0002	.0016	.....	.....	.55	.076	.0000	.00	1.95	1.55	0
Yearly avg...	none.	none.	.00	5.05	.95	4.10	.0001	.0013	.....	.....	.54	.070	.0000	.00	2.05	1.60	27

Chemical and Bacteriological Examination of the Water Supply of the Town of Westerly, the Sample being taken from the Tap at the Drinking Fountain at the Railroad Station.

Jan. 5.....	0	0	.00	5.00	.75	4.25	.0000	.0010	.....	.....	.56	.067	.0000	.00	2.34	1.65	.....
Jan. 31.....	0	tr.	.00	4.95	.90	4.05	.0000	.0018	.....	.....	.55	.073	.0000	.02	2.03	1.65	11
Feb. 29.....	0	0	.00	4.90	.75	4.15	.0000	.0008	.....	.....	.56	.054	.0000	.00	2.34	1.60	0
April 7.....	0	0	.00	5.30	.90	4.40	.0002	.0012	.....	.....	.52	.056	.0000	.00	1.95	1.50	0
May 2.....	0	0	.00	4.80	1.10	3.70	.0000	.0012	.....	.....	.53	.069	.0000	.00	2.08	1.60	1
June 1.....	0	0	.00	4.80	1.25	3.55	.0000	.0012	.....	.....	.53	.074	.0000	.00	1.69	1.55	2
July 5.....	0	0	.00	4.90	1.20	3.70	.0000	.0010	.....	.....	.53	.071	.0000	.00	1.95	1.68	111
Aug. 1.....	0	0	.00	5.55	1.10	4.45	.0000	.0012	.....	.....	.55	.077	.0000	.00	2.08	1.55	80
Sept. 1.....	0	0	.00	5.00	.85	4.15	.0000	.0018	.....	.....	.55	.078	.0000	.00	2.08	1.60	8
Oct. 3.....	0	0	.00	5.15	.95	4.20	.0000	.0012	.....	.....	.54	.078	.0000	.00	2.21	1.60	0
Nov. 1.....	0	0	.00	4.90	1.00	3.90	.0000	.0008	.....	.....	.54	.077	.0000	.00	2.08	1.70	0
Dec. 6.....	0	0	.00	5.05	1.15	3.90	.0002	.0016	.....	.....	.55	.076	.0000	.00	1.95	1.60	0
Yearly avg...	none.	none.	.00	5.05	1.00	4.05	.0000	.0012	.....	.....	.54	.071	.0000	.00	2.05	1.60	19

Westerly Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of Westerly,
Giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of
the Water at Different Points of the Supply.*

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
		Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
						Total.	In Solution.	In Suspension.							
Westerly, Pumping Station—															
1900.....	0	5.30	1.25	4.05	.0000	.0016	.....	.....	.59	.056	.0000	.01	1.80	1.50	1130
1901.....	0	5.40	1.25	4.15	.0001	.0016	.....	.....	.58	.059	.0000	.01	2.00	1.55	96
1902.....	0	5.20	.90	4.30	.0002	.0015	.....	.....	.57	.050	.0000	.00	1.95	1.50	33
1903.....	0	5.00	.80	4.20	.0001	.0013	.....	.....	.53	.049	.0000	.00	1.95	1.65	41
1904.....	0	5.05	.95	4.10	.0001	.0013	.....	.....	.54	.070	.0000	.00	2.05	1.60	27
Westerly, Drinking Fountain—															
1900.....	0	5.35	1.25	4.10	.0000	.0014	.....	.....	.59	.056	.0000	.00	1.80	1.45	340
1901.....	0	5.45	1.25	4.20	.0001	.0015	.....	.....	.58	.059	.0000	.02	2.00	1.55	520
1902.....	0	5.10	.95	4.15	.0001	.0015	.....	.....	.57	.049	.0000	.00	1.95	1.50	58
1903.....	0	5.05	.85	4.20	.0001	.0015	.....	.....	.53	.049	.0000	.00	1.95	1.65	10
1904.....	0	5.05	1.00	4.05	.0000	.0012	.....	.....	.54	.071	.0000	.00	2.05	1.60	19

East Providence Water Supply.

Chemical and Bacteriological Examination of the Water Supply of the Town of East Providence, the Sample being taken from the Ten-Mile River, at the Pumping Station at Hunt's Mills, the same being the influent to the Mechanical Filter Plant.

(Parts in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Jan. 6.....	dec.	dec.	.46	8.70	1.90	6.80	.0592	.0252	.0214	.0038	1.02	.102	.0030	.56	3.25	.70	29264
Feb. 4.....	dec.	sl.	.58	7.85	2.30	5.55	.0364	.0234	.0194	.0040	.86	.079	.0014	.79	2.34	1.05	9796
Mar. 3.....	dec.	sl.	.55	8.40	2.15	6.25	.0324	.0214	.0192	.0022	.65	.065	.0020	.71	2.03	.70	14932
April 1.....	sl.	sl.	.60	5.40	1.95	3.45	.0098	.0242	.0220	.0022	.54	.052	.0020	.67	1.95	.69	2956
May. 6.....	dist.	dist.	.84	5.90	2.45	3.45	.0018	.0272	.0214	.0058	.48	.017	.0001	.90	2.08	.88	Lost.
June 3.....	sl.	sl.	.90	6.40	2.25	4.15	.0106	.0302	.0276	.0026	.65	.039	.0006	.85	1.95	1.28	319
July 1.....	sl.	sl.	.66	7.05	2.10	4.95	.0118	.0312	.0262	.0050	.82	.034	.0010	.60	2.34	1.25	.....
Aug. 1.....	dist.	sl.	.63	8.05	2.45	5.60	.0040	.0294	.0248	.0046	1.07	.015	.0002	.56	2.03	1.50	468
Sept. 1.....	dist.	sl.	.48	8.20	2.15	6.05	.0024	.0264	.0190	.0074	1.28	.013	.0002	.39	2.34	1.55	557
Oct. 3.....	dist.	sl.	.62	8.00	1.70	6.30	.0042	.0246	.0204	.0042	.74	.052	.0004	.59	2.67	1.20	764
Nov. 1.....	dist.	sl.	.44	8.40	2.35	6.05	.0012	.0190	.0138	.0052	1.03	.057	.0002	.46	2.60	1.60	877
Dec. 1.....	dec.	dist.	.55	8.50	2.40	6.10	.0172	.0220	.0180	.0040	1.10	.085	.0016	.61	2.60	1.00	15810
Yearly avg. }	dec. to sl.	sl.	.61	7.60	2.20	5.40	.0156	.0254	.0211	.0043	.85	.051	.0011	.64	2.35	1.10	7600

Chemical and Bacteriological Examination of the Water Supply of the Town of East Providence, the Sample being the Effluent of the Mechanical Filter, at Hunt's Mills.

Jan. 6.....	0	0	.05	8.35	1.15	7.20	.0578	.0090	.....	.....	1.02	.099	.0030	.14	3.12	.55	665
Feb. 4.....	0	0	.06	7.60	1.50	6.10	.0398	.0109	.....	.....	0.84	.075	.0014	.20	2.47	.64	1209
Mar. 3.....	0	0	.04	6.05	.95	5.10	.0296	.0086	.....	.....	0.62	.065	.0020	.16	2.08	.25	102
April 1.....	0	0	.02	5.65	.90	4.75	.0082	.0100	.....	.....	0.55	.048	.0020	.11	2.21	.51	80
May 6.....	0	0	.28	6.00	1.55	4.45	.0016	.0164	.....	.....	0.49	.017	.0001	.46	1.90	.80	4
June 3.....	0	0	.10	5.80	1.15	4.65	.0094	.0114	.....	.....	0.63	.036	.0006	.23	2.15	.60	14
July 1.....	0	0	.05	7.05	1.60	5.45	.0116	.0102	.....	.....	0.80	.034	.0010	.16	2.47	.50	.....
Aug. 1.....	0	0	.05	7.25	1.30	5.95	.0036	.0090	.....	.....	1.06	.013	.0002	.15	2.21	.69	6
Sept. 1.....	0	0	.05	8.10	.95	7.15	.0028	.0074	.....	.....	1.28	.010	.0002	.10	2.21	.65	2
Oct. 3.....	0	0	.05	7.95	1.10	6.85	.0038	.0086	.....	.....	0.77	.052	.0004	.16	2.80	.80	123
Nov. 1..... }	0	sand. dec.	.10	7.75	1.55	6.20	.0018	.0062	.....	.....	1.02	.057	.0002	.16	2.60	1.00	58
Dec. 1.....	0	0	.10	9.10	1.70	7.40	.0174	.0080	.....	.....	0.90	.083	.0016	.17	3.38	.55	259
Yearly avg...	none.	none.	.08	7.25	1.30	5.95	.0156	.0096	.....	.....	0.83	.049	.0011	.18	2.45	.65	230

Average test for "alum" is negative; (all negative but one test [Dec.]).

East Providence Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of East Providence,
Giving the Average for the Years 1900-1904, Grouped for Comparison of the Quality of
the Water at Different Points of the Supply.*

(Parts in 100,000.)

DATE OF COLLECTION.	RESIDUE ON EVAPO- RATION.				AMMONIA.				NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.					
						Total.	In Solution.	In Suspension.								
East Providence, River at Pumping Sta- tion—																
1900.....	.58	6.50	2.00	4.50	.0026	.0234	.0205	.0029	.69	.017	.0003	.58	1.85	1.10	730	
1901.....	.51	6.60	2.10	4.50	.0074	.0233	.0209	.0024	.76	.030	.0008	.58	2.10	.95	5250	
1902.....	.50	6.25	1.85	4.40	.0066	.0222	.0191	.0031	.67	.024	.0006	.65	1.90	.85	1925	
1903.....	.52	6.95	1.90	5.05	.0078	.0225	.0195	.0030	.74	.033	.0006	.56	2.15	.95	4900	
1904.....	.61	7.60	2.20	5.40	.0156	.0254	.0211	.0043	.85	.051	.0011	.64	2.35	1.10	7600	
East Providence, Outlet of Mechanical Fil- ter—																
1900.....	.08	6.15	1.65	4.50	.0022	.0086	.....	.....	.66	.018	.0003	.18	2.10	.35	18	
1901.....	.05	6.50	1.50	5.00	.0067	.0084	.....	.....	.73	.026	.0008	.17	2.35	.20	34	
1902.....	.06	6.00	1.25	4.75	.0059	.0077	.....	.....	.64	.022	.0006	.19	2.20	.10	51	
1903.....	.04	6.65	1.20	5.45	.0072	.0074	.....	.....	.75	.032	.0006	.14	2.30	.50	115	
1904.....	.08	7.25	1.30	5.95	.0156	.0096	.....	.....	.83	.049	.0011	.18	2.45	.65	230	

New Shoreham Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of New Shoreham,
the Sample being taken from Sands' Pond, at the Intake.*

(Parts, in 100,000.)

DATE OF COLLECTION.	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.							
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.	Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
								Total.	In Solution.	In Suspension.							
Jan. 11.....	none	v. sl.	.08	8.75	1.65	7.10	.0014	.0180	.0178	.0002	3.13	.009	.0000	.10	2.54	1.30	868
Feb. 1.....	sl.	v. sl.	.10	9.60	1.70	7.90	.0014	.0220	.0210	.0010	3.00	.009	.0000	.15	2.93	2.05	6840
Mar. 3.....	dist.	v. sl.	.30	9.00	1.30	7.70	.0014	.0184	.0168	.0016	2.85	.013	.0000	.13	2.67	1.70	2066
April 5.....	sl.	v. sl.	.25	8.95	2.10	6.85	.0026	.0236	.0188	.0048	2.83	.004	.0000	.20	2.21	1.11	Lost.
May 3.....	dec.	sl.	.10	8.25	1.65	6.60	.0018	.0226	.0186	.0040	2.60	.018	.0001	.13	2.34	1.50	1736
June 1.....	v. sl.	sl.	.06	8.45	3.35	5.10	.0118	.0420	.0324	.0096	2.43	.008	.0000	.33	1.27	0.59	.....
July 5.....	sl.	sl.	.15	7.95	2.50	5.45	.0012	.0244	.0200	.0044	2.60	.001	.0000	.15	1.69	1.10	177
Aug. 1.....	sl.	sl.	.11	8.35	2.35	6.00	.0012	.0240	.0210	.0030	2.62	.002	.0000	.11	1.95	1.05	8308
Sept. 6.....	sl.	sl.	.15	8.10	2.05	6.05	.0040	.0326	.0236	.0090	2.60	.010	.0000	.17	1.82	0.90	433
Oct. 5.....	v. sl.	dist.	.10	9.15	3.00	6.15	.0160	.0550	.0336	.0214	2.66	.022	.0000	.32	2.08	1.30	3795
Nov. 1.....	v. sl.	v. sl.	.15	8.90	3.00	5.90	.0052	.0426	.0328	.0098	2.76	.031	.0000	.19	1.95	1.45	173
Dec. 7.....	v. sl.	v. sl.	.15	8.70	2.55	6.15	.0020	.0254	.0230	.0024	2.82	.039	.0000	.20	2.08	1.35	2500
Yearly av. {	v. sl. to sl.	v. sl. to sl.	.14	8.65	2.25	6.40	.0042	.0292	.0233	.0059	2.74	.014	.0000	.18	2.15	1.30	2720

New Shoreham Water Supply.

*Chemical and Bacteriological Examination of the Water Supply of the Town of New Shoreham,
Giving the Average for the Years 1900-1904.*

(Parts in 100,000.)

DATE OF COLLECTION.	Color.	RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.			Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
		Total.	Loss on Ignition.		Free.	Albuminoid.			As Nitrates.	As Nitrites.					
			Total.	In Solution.		In Suspension.									
New Shoreham, Sands' Pond—															
1900*.....		13.55	4.35	9.20	.0287	.0556	.0455	.0101	3.62	.016	†.0053	.96	2.40	1.25	2897
1901.....	.24	10.00	2.40	7.60	.0026	.0282	.0222	.0060	3.08	.006	.0000	.35	2.15	0.85	13206
1902.....	? 10	9.80	2.40	7.40	.0060	.0340	.0259	.0081	3.09	.018	.0000	.35	2.25	1.05	20023
1903.....	.19	8.35	1.60	6.75	.0016	.0191	.0172	.0019	2.66	.013	.0000	.15	2.10	1.15	2620
1904.....	.14	8.65	2.25	6.40	.0042	.0292	.0233	.0059	2.74	.014	.0000	.18	2.15	1.30	2720

* One sample very high in all determinations.

† All determinations 0 except one.

? One sample very poor in color—not in avg.

Averages of Results of Chemical and Bacteriological Examinations of all the Water Supplies in the State, January to December, inclusive, for the Year 1904.

(Parts in 100,000.)

	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.	
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.					As Nitrites.
								Total.	In Solution.	In Suspension.							
Petta'n't (Prov.).	dist.	dist.	.46	5.30	1.90	3.40	.0027	.0226	.0183	.0043	.42	.019	.0003	.63	1.45	.65	3000
Washin'n (Prov.)	sl.	sl.	.51	3.75	1.45	2.30	.0040	.0183	.0162	.0021	.29	.006	.0001	.59	.65	.45	846
Hope (Prov.)....	v. sl.	sl.	.38	3.55	1.30	2.25	.0016	.0148	.0135	.0013	.27	.007	.0000	.48	.75	.50	834
Tap in Lab.(Pro.)	sl.	sl.	.41	4.75	1.50	3.25	.0023	.0170	.0150	.0020	.42	.023	.0001	.49	1.40	.65	1140
P. V. Water Co..	v. sl.	v. sl.	.26	3.75	1.25	2.50	.0017	.0146	.0134	.0012	.35	.014	.0000	.29	1.35	1.05	904
Knight's Spring..	none.	none.	.00	6.10	2.30	3.80	.0002	.0013	.....	.....	.70	.328	.0000	.00	2.05	.45	326
Coventry Water Co.....	none.	none.	.08	2.00	.65	1.35	.0009	.0071	.....	.....	.31	.004	.0000	.07	.55	.45	362
E. Greenwich....	v. sl.	v. sl.	.38	4.50	1.40	3.10	.0008	.0103	.0093	.0010	.41	.017	.0000	.40	1.45	1.15	576
Woon. Res. 3....	sl.	sl.	.45	3.20	1.65	1.55	.0037	.0292	.0228	.0064	.25	.005	.0000	.51	.65	.40	595
“ P. Sta.....	sl.	sl.	.52	3.95	1.65	2.30	.0036	.0200	.0179	.0021	.30	.008	.0000	.62	1.00	.60	764
“ Supt's. Office	sl.	sl.	.51	3.90	1.70	2.20	.0025	.0197	.0172	.0025	.30	.008	.0000	.61	1.00	.60	612
Pawt., P. Sta. 3.	v. sl.	v. sl.	.25	4.20	1.15	3.05	.0026	.0126	.0120	.0006	.33	.016	.0001	.29	1.50	1.05	1425
“ Di'm'd Hill Res.....	v. sl.	v. sl.	.23	3.25	1.25	2.00	.0038	.0191	.0164	.0027	.32	.005	.0000	.39	1.05	.60	194
“ Sneece P'd Brook....	v. sl.	sl.	.32	4.65	1.40	3.25	.0020	.0133	.0117	.0016	.34	.010	.0000	.39	1.80	1.40	1659
Bristol & Warren P. Sta.....	dist.	dec.	.96	7.00	2.95	4.05	.0044	.0388	.0325	.0063	.96	.009	.0001	1.21	1.85	.85	14393
Bristol & Warren Tap. Bristol...	dist.	dec.	.94	7.85	3.20	4.65	.0035	.0423	.0316	.0107	.96	.013	.0001	1.23	2.05	1.05	11620
Narrag., P. Sta..	sl.	v. sl.	.80	4.85	1.95	2.90	.0030	.0203	.0183	.0020	.61	.010	.0000	.83	.90	.55	1769

Averages of Results of Chemical and Bacteriological Examinations of all the Water Supplies in the State, January to December inclusive, for the year 1904.—Concluded.

(Parts in 100,000.)

	APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				Chlorine.	NITRO- GEN.		Oxygen Consumed.	Hardness.	Alkalinity.	Bacteria per c. c.
	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.				As Nitrates.	As Nitrites.				
								Total.	In Solution.	In Suspension.							
Narrag., Tap, Of.	sl.	v. sl.	.79	5.15	2.00	3.15	.0023	.0194	.0176	.0018	.62	.014	.0000	.83	1.00	.55	2314
“ Gladstone Spring..	none.	none.	.00	6.55	1.45	5.10	.0001	.0011	.....	.....	1.30	.037	.0000	.00	2.30	1.25	51
Newp't, Easton's Pond.....	dec.	cons.	.29	8.45	2.90	5.55	.0138	.0536	.0364	.0172	1.64	.022	.0005	.60	2.70	1.75	2403
Newp't, Eng. Cot- tage.....	dec.	sl.	.27	9.30	2.85	6.45	.0171	.0390	.0316	.0074	1.96	.041	.0004	.49	3.20	2.15	4203
Newport, Tap, City	sl.	sl.	.25	9.05	2.70	6.35	.0083	.0364	.0296	.0068	1.88	.042	.0004	.44	3.10	2.10	1426
Jamestown, No. P. Station.....	sl.	sl.	.72	7.20	2.95	4.25	.0064	.0383	.0335	.0048	1.13	.020	.0000	1.01	1.85	.90	2050
Jamestown, So. P. Station* ...	none to v. sl.	v. sl.	.14	12.30	3.75	8.55	.0023	.0107	.0093	.0014	3.13	.341	.0002	.28	4.30	1.55	3750
Jamestown, Tap, Watson's.....	sl.	sl.	.74	7.25	2.55	4.70	.0032	.0353	.0311	.0042	1.12	.022	.0001	.91	2.25	1.45	2036
Westerly, P. Sta.	none.	none.	.00	5.05	.95	4.10	.0001	.0013	.....	.....	.54	.070	.0000	.00	2.05	1.60	27
Westerly Drink- ing Fountain..	none.	none.	.00	5.05	1.00	4.05	.0000	.0012	.....	.....	.54	.071	.0000	.00	2.05	1.60	19
East Prov. Ten Mile River....	dec. to sl.	sl.	.61	7.60	2.20	5.40	.0156	.0254	.0211	.0043	.85	.051	.0011	.64	2.35	1.10	7600
East Prov. Outlet of Filter.....	none.	none.	.08	7.25	1.30	5.95	.0156	.0096	.....	.....	.83	.049	.0011	.18	2.45	.65	230
New Shoreham, Sands' Pond...	v. sl. to sl.	v. sl. to sl.	.14	8.65	2.25	6.40	.0042	.0292	.0233	.0059	2.74	.014	.0000	.18	2.15	1.30	2720

* Average of sample collected, Feb.—Dec.

EXAMINATION OF RAW AND TREATED SEWAGES.

One of the most difficult problems presented for solution is the disposal of sewage wastes by cities, towns, and large institutions.

Few inland towns are so located as to make it possible to discharge their crude sewage into a nearby flowing stream or a large body of water.

In most cases it is necessary that the sewage shall be treated in some way before being finally disposed of or a nuisance will be created sooner or later which will demand attention.

In England and Germany much study has been given to the investigation and management of sewage disposal plants, and the boards of health are in a position to give advice to any town desirous of correcting its unsanitary conditions.

Inasmuch as no two towns have the same character of sewage, it is necessary to determine at least a slightly different form of treatment for each.

The population of the town, the character of the population, the introduction of manufacturing wastes, the presence of an ample supply of water, the utilization of the common sewage pipes for the removal of surface water, all have an influence and may modify materially the density and the composition of the sewage.

The State of Massachusetts has for many years maintained a continuous study of the variable factors, publishing the results of their investigations yearly. As the towns of our neighboring State are constituted most like our own cities and villages, a study of these reports is of valuable assistance. With the same end in view, this Board has, with its facilities for chemical and bacteriological analyses, undertaken to determine the varying conditions attending the dis-

posal of sewage wastes of those cities in the State which have made an effort to purify their sewage before final disposal. At the present time this includes the cities of Pawtucket, Woonsocket, Central Falls, and Providence.

All of these cities, realizing that to dispose of their crude sewage by delivering it untreated into streams near them would sooner or later call for censure, have made provision to meet the existing conditions.

By periodical examination of the crude sewage at each plant, and of the effluent, or sewage which has been treated by the various processes of sedimentation, "septic fermentation," filtration, or by chemicals, it has been possible to determine the effectiveness of each process.

The Board has thus been in a position to advise the engineering departments of the different cities in what way greater efficiency in purification might be attained. This information has been acted upon in many cases, and the several engineers have a full understanding of the value of each portion of their plant in the treatment of their own particular sewage.

The city of Pawtucket in 1894 installed a filtration system for the treatment of the sewage received from that portion of the city known as the Moshassuck river drainage area. The balance of the sewage is discharged untreated directly into the Blackstone river.

This system consists of two tanks, 100 feet long, 30 feet wide, and 3 feet deep. One of these tanks is allowed to fill and the solids to settle. The supernatant fluid is allowed to flow upon the sand filter beds as soon as a tank becomes filled. The second tank is then utilized in the same way. The filter beds consist of 16 beds of carefully selected sand of proper size for the purpose of filtering sewage.

The beds are flowed or dosed in rotation permitting of a period of rest, and oxidation or nitrification of the sewage material, which has been caught in the beds. After several months of use the surface of the beds for a depth of a fraction of an inch is scraped off and in time this is replaced with new sand.

Only plain sedimentation has been used this year at this plant, the septic process which has been tried before having been given up.

The plant has been operated by the city engineer, Mr. George A. Carpenter. With his co-operation the laboratory of this department has been enabled to obtain a profitable understanding of the efficiency of this means of treatment of the Pawtucket sewage.

This data is also of use in assisting other cities and towns which are now using, or may in the future be obliged to use, some means of purification.

A detailed account, with data on the operation of this plant, will be found in the report of the city engineer of Pawtucket, on pages 33-38 of this report. The analyses made by this Board are given in the tables following.

At Central Falls, where similar tanks are utilized for the treatment of the sewage, the septic process has been continued with the exception of a period of a little over two months when straight sedimentation was employed.

The results obtained may be found upon pages 26 and 27 of this report, being a portion of the report of W. F. Keene, city engineer. The analyses made by this Board will follow in the tables.

The method of disposal of the sewage from the city of Woonsocket is to receive the flow in a sedimentation gallery or dosing tank, from which it goes on to the several beds prepared for that purpose. For extracts from City Engineer F. H. Mill's report see pages 60 and 61 in this report. The regular analyses made by this department are given in the following tables.

Comparison of the different sewages as received for treatment shows that the heaviest sewage is supplied by the city of Central Falls, the next heaviest sewage is supplied by the city of Pawtucket, and the least concentrated is from the city of Woonsocket.

The city of Providence, having such a large amount of sewage to be disposed of, treats the same by chemical precipitation. The strength of the sewage in organic matter is about the same as that of the city of Woonsocket.

The sewage is mixed with measured quantities of lime and sulphate of iron while flowing through the main outfall sewer. It then passes through large deep cement basins, while the coagulated sewage and chemicals settle or precipitate. The supernatant liquor is then flowed into other tanks for further sedimentation. The accumulated sediment or sludge is flowed into a sump well, pumped into sludge basins, and further condensed. The sludge obtained is forced into presses and the water squeezed through canvas cloth. The somewhat dry cake resulting is carried by means of a small tramway to sand pits and there dumped. The sludge has no value as a fertilizer. This is the fourth year of the operation of this plant, the precipitation work having been begun in April, 1901. An abbreviated account of the working of this plant, as given in the report of City Engineer Otis F. Clapp, will be found on pages 45 and 46 of this report. Analyses of the crude sewage and of the effluent leaving the precipitation tanks are given in the following tables. This Board began to make these analyses as part of its routine examinations in April of this year.

The results shown in the following tables offer an opportunity for study of the methods of treatment of sewage which might be utilized to improve the character of the same before being discharged into streams.

Pawtucket Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the day flow as received at the purification plant, before passing screens.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.					NITRO-GEN.		Oxygen Consumed.	Bacteria per c. c.
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
										Total.	In Solution.	In Suspension.					
Jan.	12	.....	.....	.....	.....	164.4	48.8	115.6	8.20	2.35	.82	1.53	8.58	.....	.....	21.40	24,800,000
Feb.	2	.....	.....	.....	.....	133.2	71.4	61.8	8.00	1.79	.87	.92	9.42	.....	.....	14.40	16,270,000
Feb.	18	.....	.....	.....	.....	73.6	46.8	26.8	6.40	.96	.53	.43	8.10	.....	.....	12.10	8,390,000
March...	1	.....	.....	.....	.....	68.0	42.0	26.0	7.10	.78	.47	.31	6.38	.....	.....	14.50	8,030,000
March...	15	.....	.....	.....	.....	63.8	46.4	17.4	5.60	1.01	.59	.42	6.44	.....	.....	14.80	5,250,000
March...	29	.....	.....	.....	.....	97.4	65.4	32.0	8.00	1.34	.72	.62	8.20	.....	.....	24.20	15,600,000
April....	13	.....	.....	.....	.....	90.2	55.6	34.6	5.60	1.02	.48	.54	7.60	.....	.....	15.30	13,630,000
April....	26	.....	.....	.....	.....	92.0	51.4	40.6	8.20	1.35	.61	.74	8.38	.....	.....	13.40	23,560,000
May.....	10	.....	.....	.....	.....	75.2	49.6	25.6	5.60	.96	.56	.40	9.18	.....	.....	9.80	42,340,000
May.....	24	.....	.....	.....	.....	74.4	49.6	24.8	7.00	1.27	.47	.80	7.60	.....	.....	11.00	16,640,000
June....	7	.....	.....	.....	.....	126.8	59.8	67.0	6.20	1.11	.44	.67	24.40	.....	.....	11.50	39,618,000
June....	23	.....	.....	.....	.....	86.6	52.6	34.0	8.80	1.31	.67	.64	12.42	.....	.....	8.70	18,180,000
July.....	6	.....	.....	.....	.....	91.8	59.2	32.6	8.60	1.21	.63	.58	10.80	.....	.....	11.80	27,700,000
July.....	19	.....	.....	.....	.....	99.2	67.4	31.8	7.60	1.64	.75	.89	16.82	.....	.....	10.60	14,780,000
Aug.....	1	.....	.....	.....	.....	127.4	65.0	62.4	8.20	1.40	.66	.74	10.20	.....	.....	13.50	11,150,000
Aug.....	23	.....	.....	.....	.....	118.2	66.4	51.8	7.60	1.60	.85	.75	10.80	.....	.....	13.20	16,120,000
Sept....	6	.....	.....	.....	.....	168.2	83.2	85.0	8.20	2.20	.58	1.62	20.60	.....	.....	17.80	13,580,000
Sept....	20	.....	.....	.....	.....	77.2	47.4	29.8	6.20	.92	.50	.42	7.40	.....	.....	10.30	5,540,000
Oct.....	4	.....	.....	.....	.....	96.8	69.6	27.2	8.00	1.21	.71	.50	12.80	.....	.....	10.70	16,120,000
Oct.....	18	.....	.....	.....	.....	108.6	65.0	43.6	8.20	1.50	.47	1.03	8.80	.....	.....	15.80	32,240,000
Nov.....	1	.....	.....	.....	.....	145.8	76.8	69.0	9.80	2.20	.81	1.39	10.20	.....	.....	21.60	.....
Nov.....	15	.....	.....	.....	.....	89.0	59.8	29.2	7.40	1.26	.61	.65	7.78	.....	.....	14.60	7,185,000
Nov.....	29	.....	.....	.....	.....	142.6	54.0	88.6	6.00	1.93	.63	1.30	8.38	.....	.....	15.10	37,200,000
Dec.....	13	.....	.....	.....	.....	110.2	57.8	52.4	8.60	1.23	.68	.55	9.76	.....	.....	15.90	23,260,000
Yearly average..		.....	.....	.....	.....	105.0	58.8	46.2	7.47	1.40	.63	.77	10.50	.....	.....	14.30	19,000,000

*See also pages 33-38 of this report.

Pawtucket Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being taken from the day flow as received at the purification plant, after passing screens.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO-GEN		Oxygen Consumed.	Bacteria per c. c.	
	Collection.	Examination.											As Nitrates.	As Nitrites.			
			Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.							Chlorine.
										Total.	In Solution.	In Suspensino.					
Jan.	12	...	.....	.....	.....	85.0	50.0	35.0	8.40	1.32	.79	.52	8.22	.....	.....	15.00	17,360,000
Feb.	2	...	.....	.....	.....	110.6	71.8	38.8	8.00	1.38	.90	.48	9.90	.....	.....	12.00	33,800,000
Feb.	18	...	.....	.....	.....	80.8	55.8	25.0	7.00	.87	.56	.31	10.76	.....	.....	13.10	7,535,000
Mar.	1	...	.....	.....	.....	63.4	40.8	22.6	6.50	.62	.55	.07	6.00	.....	.....	13.90	15,400,000
Mar.	15	...	.....	.....	.....	67.4	49.6	17.8	5.80	1.11	.71	.40	6.80	.....	.....	14.70	4,840,000
Mar.	29	...	.....	.....	.....	101.4	69.8	31.6	8.00	1.51	1.08	.43	9.20	.....	.....	20.80	11,590,000
April. ...	13	...	.....	.....	.....	68.8	47.8	21.0	5.00	.80	.47	.33	7.00	.....	.....	10.60	12,300,000
April. ...	26	...	.....	.....	.....	104.6	56.2	48.4	9.60	1.37	.78	.59	8.90	.....	.....	13.00	15,400,000
May.	10	...	.....	.....	.....	85.6	57.2	28.4	6.40	1.06	.75	.31	9.55	.....	.....	11.10	22,320,000

* See also pages 33-38 of this report.

Pawtucket Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Pawtucket, the sample being the supernatant liquor as flowing onto beds after holding sewage in settling tank.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.						NITRO-GEN.		Oxygen Consumed.	Bacteria per c. c.
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.			
										Total.	In Solution.	In Suspension.						
Jan.	12	.....	.....	.....	.....	64.0	45.2	18.8	9.40	1.19	.74	.45	8.40	.....	.....	11.00	19,840,000
†Feb.	2	.....	.....	.....	.....	90.8	66.4	24.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb.	18	.....	.....	.....	.....	62.8	48.2	14.6	8.00	.82	.59	.23	8.20	.....	.....	9.70	9,765,000
Mar.	1	.....	.....	.....	.....	67.4	48.2	19.2	8.00	.72	.51	.21	7.60	.....	.....	13.60	7,910,000
Mar.	15	.....	.....	.....	.....	74.8	56.0	18.8	7.00	1.18	.72	.46	7.80	.....	.....	15.30	7,930,000
Mar.	29	.....	.....	.....	.....	102.2	76.6	25.6	10.80	1.12	.73	.39	9.84	.....	.....	21.80	10,330,000
April.	13	.....	.....	.....	.....	53.6	40.0	13.6	5.50	.72	.48	.24	6.10	.....	.....	9.40	13,630,000
April.	26	.....	.....	.....	.....	84.6	55.8	28.8	9.60	1.27	.63	.64	10.40	.....	.....	12.20	Lost
May.	10	.....	.....	.....	.....	78.0	53.0	25.0	7.00	1.15	.65	.50	9.10	.....	.....	11.10	30,680,000
May.	24	.....	.....	.....	.....	58.8	44.8	14.0	7.00	.74	.56	.18	7.40	.....	.....	7.60	22,840,000
June.	7	.....	.....	.....	.....	72.2	46.4	25.8	7.20	.86	.60	.26	9.20	.....	.....	10.40	24,080,000
June.	23	.....	.....	.....	.....	53.6	42.0	11.6	9.00	.74	.52	.22	8.30	.....	.....	5.90	Lost
July.	6	.....	.....	.....	.....	80.8	60.8	20.0	8.80	.97	.61	.36	14.60	.....	.....	7.10	26,140,000
July.	19	.....	.....	.....	.....	75.6	54.6	21.0	7.20	.70	.51	.19	15.40	.....	.....	6.80	11,200,000
Aug.	1	.....	.....	.....	.....	65.0	50.8	14.2	9.00	.73	.47	.26	11.30	.....	.....	6.30	3,550,000
Aug.	23	.....	.....	.....	.....	75.6	58.6	17.0	10.00	1.10	.67	.43	13.42	.....	.....	7.80	7,790,000
Sept.	6	.....	.....	.....	.....	102.4	69.6	32.8	9.80	1.22	.59	.63	15.00	.....	.....	10.60	18,260,000
Sept.	20	.....	.....	.....	.....	56.4	42.4	14.0	6.20	.85	.50	.35	7.22	.....	.....	6.70	3,370,000
Oct.	4	.....	.....	.....	.....	78.8	57.0	21.8	7.80	1.05	.70	.35	10.42	.....	.....	9.80	22,740,000
Oct.	18	.....	.....	.....	.....	71.2	51.4	19.8	9.80	1.23	.74	.49	10.60	.....	.....	8.90	18,370,000
Nov.	1	.....	.....	.....	.....	82.8	53.8	29.0	9.80	1.25	.63	.62	12.62	.....	.....	11.00	4,320,000
Nov.	15	.....	.....	.....	.....	75.2	50.4	24.8	6.60	.91	.61	.30	7.00	.....	.....	11.50	9,250,000
Nov.	29	.....	.....	.....	.....	64.8	45.4	19.4	7.60	.92	.60	.32	7.90	.....	.....	9.50	67,580,000
Dec.	13	.....	.....	.....	.....	70.0	50.2	19.8	9.40	.97	.61	.36	9.04	.....	.....	11.80	29,620,000
Yearly average.	.....	.....	.....	.....	.....	73.4	52.8	20.6	8.28	.98	.61	.37	9.90	.....	.....	10.30	17,600,000

* See also pages 33-38 of this report.

† Residue on evaporation was the only determination made on this sample.

Pawtucket Sewage.*

Chemical and Bacteriological Examination of the Effluent or Filtered Sewage of the City of Pawtucket, being taken from the effluent pipe from regular sand beds 5-16.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO-GEN.			Oxygen Consumed.	Bacteria per c. c.	BED NO.
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.*	As Nitrates.	As Nitrites.			
										Total.	In Solution.	In Suspension.						
Jan.....	12 ...	dec.	dec.	br.	38.7	14.1	24.6	5.28	.4680	.4180	.0500	9.10	.05	.0140	5.00	1,147,000	Beds 12 and 13.	
Feb.....	2 ...	dec.	sl.	br.	38.6	11.4	27.2	5.60	.2200	.2020	.0180	14.00	.10	.0100	2.98	374,000	Beds 7, 8 and 9.	
Feb.....	18 ...	dec.	dec.	br.	32.5	15.9	16.6	6.24	.2800	.2240	.0560	7.36	.07	.0030	3.02	366,300	Bed 15.	
Mar.....	1 ...	dec.	v. sl.	br.	33.5	6.0	33.5	7.92	.2460	.1920	.0540	8.84	.04	.0030	4.16	142,000	Beds 10 and 11.	
Mar.....	16 ...	dec.	sl.	br.	29.6	9.5	20.1	3.84	.2100	.1600	.0500	6.10	.51	.0300	2.76	291,500	Beds 12 and 13.	
Mar.....	30 ...	sl.	sl.	.70	42.6	15.9	26.7	3.60	.1800	.1600	.0200	7.56	3.02	.0600	1.85	110,500	Bed 14.	
April....	13 ...	sl.	dec.	.45	52.0	20.2	31.8	2.80	.1300	.0820	.0480	7.18	3.15	.0600	1.50	3,348,000	Bed 14.	
April....	26 ...	dec.	sl.	.50	46.3	20.0	26.3	3.60	.1580	.1300	.0280	8.98	3.04	.0400	1.51	210,500	Bed 5.	
May.....	10 ...	dist.	sl.	.35	57.5	29.6	27.9	1.12	.1180	.1040	.0140	7.24	4.82	.0200	1.76	42,500	Bed 16.	
May.....	24 ...	v. sl.	hyd. sl.	.20	54.3	16.8	37.5	1.36	.0680	.0500	.0180	7.38	3.95	.0060	.79	76,000	Beds 6, 7 and 8.	
June....	7 ...	v. sl.	sl.	.20	56.3	28.7	27.6	1.48	.0680	.0640	.0040	7.80	4.63	.2100	.91	4,500	Bed 14.	
June....	23 ...	0	hyd. sl.	.20	47.4	12.6	34.8	.58	.0560	.0400	.0160	7.78	4.40	.0020	.62	900	Beds 12 and 13.	
July.....	6 ...	dist.	dec.	.27	55.4	23.2	32.2	1.62	.1880	.0840	.1040	10.20	3.50	.0160	1.63	1,333,000	Bed 14.	
July.....	19 ...	v. sl.	sl.	.20	53.0	19.2	33.8	.80	.0660	.0540	.0120	10.22	4.48	.0100	.74	774,000	Beds 7, 8 and 9.	
Aug.....	1 ...	0	tr.	.20	49.6	16.4	33.2	.63	.0500	.0480	.0020	9.02	4.40	.0042	.62	34,000	Beds 10 and 11.	
Aug.....	23 ...	dec.	v. sl.	.40	50.2	19.2	31.0	1.10	.1360	.1120	.0240	10.62	3.72	.0180	1.43	15,000	Bed 16.	
Sept....	6 ...	v. sl.	sl.	.25	58.0	21.1	36.9	.80	.0500	.0460	.0040	10.90	5.27	.0120	.73	43,600	Beds 6 and 7.	
Sept....	20 ...	0	v. sl.	.15	41.1	10.9	30.2	.26	.0260	.0260	.0000	6.82	3.08	.0014	.47	1,000	Bed 8.	
Oct.....	4 ...	0	inorg. tr.	.17	49.1	19.9	29.2	.48	.0400	.0400	.0000	8.78	4.22	.0060	.50	4,600	Beds 6, 7 and 8.	
Oct.....	18 ...	dec.	hyd. dec.	.24	43.9	18.1	25.8	1.76	.1400	.0900	.0500	10.20	2.67	.0600	1.58	36,500	Bed 16.	
Nov.....	1 ...	sl.	dec.	.20	43.6	15.9	27.7	2.00	.0860	.0660	.0200	10.04	2.27	.0200	1.41	23,500	Bed 15.	
Nov.....	15 ...	sl.	sl.	.24	32.7	13.0	19.7	1.30	.1240	.0800	.0440	5.98	1.81	.0360	1.82	26,000	Bed 5.	
Nov.....	29 ...	dec.	dec.	br.	41.4	21.2	20.2	2.96	.3200	.2580	.0620	7.58	1.84	.0100	3.66	24,050	Bed 6.	
Dec.....	13 ...	dec.	sl.	br.	37.0	13.6	23.4	3.20	.1960	.1700	.0260	9.40	.84	.0400	2.78	1,246,000	Beds 7, 8 and 9.	
Yearly average..	sl.	sl.	abt	29	45.4	17.2	28.2	2.51	.1510	.1210	.0300	8.70	2.74	.0290	1.84	400,000	

* See also pages 33 and 38 of this report.

Central Falls Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the well before entering tanks.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.			Chlorine.	NITRO-GEN		Oxygen Consumed.	Bacteria per c. c.	
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.			As Nitrates.	As Nitrites.			
										Total.	In Solution.						In Suspension.
Jan.	14	...	...	...	...	134.2	83.2	51.0	11.80	2.25	1.43	.82	18.00	...	...	16.00	25,420,000
Mar.	15	...	...	...	...	206.2	54.0	152.2	5.80	1.30	.71	.59	8.10	...	...	13.60	30,480,000
April. ...	19	...	...	...	...	289.2	104.4	184.8	11.00	3.50	1.66	1.84	18.40	...	...	45.60	42,780,000
May.	16	...	...	...	...	145.8	82.4	63.4	8.00	1.36	.86	.50	13.62	...	...	19.70	39,060,000
June.	14	...	...	...	...	152.8	92.2	60.6	12.00	1.81	.95	.86	15.20	...	...	22.40	5,290,000
Aug.	2	...	...	...	...	293.6	239.6	54.0	7.80	1.28	.71	.57	100.50	...	...	15.20	18,920,000
Aug.	31	...	...	...	...	157.4	95.2	62.2	6.60	1.07	.53	.54	34.70	...	...	13.50	7,640,000
Sept.	12	...	...	...	...	177.0	125.4	51.6	8.20	1.42	.75	.67	34.40	...	...	19.20	63,240,000
Oct.	11	...	...	...	...	136.0	58.2	77.8	16.00	2.46	.82	1.64	13.00	...	...	15.90	17,060,000
Nov.	14	...	...	...	...	171.4	134.6	36.8	10.80	1.96	1.05	.91	21.42	...	...	17.40	7,585,000
Dec.	12	...	...	...	...	211.6	129.0	82.6	10.00	1.90	.85	1.05	17.38	...	...	30.40	20,780,000
Yearly average.						188.7	108.9	79.8	9.82	1.85	.94	.91	26.80	...	...	20.80	25,300,000

* See also pages 26-27 of this report.

Central Falls Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the sample being taken from the outlet of the septic tank.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.			NITRO-GEN.			Oxygen Consumed.	Bacteria per c. c.	
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
										Total.	In Solution.	In Suspension.					
Jan.	14	...	.....	.....	.....	83.6	68.6	15.0	13.00	.89	.66	.23	14.82	....	....	10.60	5,035,000
Feb.	24	...	.....	.....	.....	85.8	61.2	24.6	7.00	.98	.60	.38	14.90	....	....	14.90	8,060,000
Mar.	15	...	.....	.....	.....	41.4	32.4	9.0	5.80	.54	.38	.16	6.58	....	....	6.50	.....
July.	14	...	.....	.....	.....	118.2	100.2	18.0	13.20	.85	.58	.27	29.66	....	....	8.60	2,200,000
Aug. ...	2	...	.....	.....	.....	93.4	77.6	15.8	11.40	.88	.51	.37	19.20	....	....	8.80	2,515,000
Aug. ...	31	...	.....	.....	.....	122.6	112.0	10.6	13.00	.91	.56	.35	23.60	....	....	9.00	1,150,000
Sept.	12	...	.....	.....	.....	89.0	70.0	19.0	14.00	.59	.40	.19	18.40	....	....	8.70	1,040,000
Oct.	11	...	.....	.....	.....	92.2	61.0	31.2	14.00	1.00	.49	.51	21.40	....	....	8.50	7,070,000
Nov.	14	...	.....	.....	.....	119.4	81.2	38.2	13.00	1.23	.71	.62	17.70	....	....	12.20	23,560,000
Dec.	12	...	.....	.....	.....	90.2	69.6	20.6	14.00	.99	.78	.21	17.04	....	....	15.20	12,730,000
Yearly average.			.....	.....	.....	93.6	73.4	20.2	15.40	.90	.57	.33	18.30	....	....	10.30	7,040,000

Chemical and Bacteriological Examination of the Sewage of the City of Central Falls, the samples being taken from the outlet of the tanks used as settling tanks only.

April....	19	...	.....	.....	.....	154.6	122.2	32.4	12.20	1.33	1.13	.20	31.44	....	....	23.60	48,980,000
May....	16	...	.....	.....	.....	188.4	107.2	81.2	11.00	1.73	1.21	.52	20.18	....	....	26.90	19,760,000
June....	14	...	.....	.....	.....	146.2	101.0	45.2	12.00	1.61	.96	.65	20.20	....	....	18.40	.....
Yearly average.			.....	.....	.....	163.1	110.2	52.9	11.73	1.56	1.10	.46	23.90	....	....	23.00	34,400,000

* See also pages 26-27 of this report.

Central Falls Sewage.*

*Chemical and Bacteriological Examination of the Sewage Effluent of the City of Central Falls,
the sample being a mixture of the outlets from all the beds.*

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN			Oxygen Consumed.	Bacteria per c. c.
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
										Total.	In Solution.	In Suspension.					
Jan.....	14	...	dec.	dec.	br.	65.3	15.8	49.5	8.00	.2960	.2280	.0680	18.60	.02	.0000	3.70	1,054,000
Feb.....	15	...	dec.	v. sl.	br.	67.6	15.8	51.8	8.00	.1600	.1200	.0400	18.58	.46	.0000	3.24	16,000
Mar.....	15	...	dec.	dec.	br.	44.2	11.6	32.6	7.20	.2280	.1980	.0300	11.02	.04	.0010	2.88	660,000
April....	19	...	dec.	sl.	br.	42.2	8.8	33.4	5.60	.2140	.1680	.0460	11.80	.52	.0140	2.38	241,800
May....	16	...	dec.	v. sl.	br.	69.1	13.9	55.2	7.20	.2080	.1960	.0120	22.90	.05	.0000	3.10	235,000
June....	14	...	sl.	dec.	br.	62.6	12.9	49.7	5.20	.2360	.1340	.1020	19.40	.50	.1640	2.16	969,000
July....	14	...	dec.	dec.	br.	84.4	14.6	69.8	6.40	.2760	.1560	.1200	24.96	.64	.0010	2.94	3,441,000
Aug....	2	...	dec.	hea.	.80	76.3	11.1	65.2	6.40	.3100	.1500	.1600	25.16	.10	.0900	2.48	1,173,000
Aug....	31	...	dec.	sl.	.48	81.3	14.2	67.1	4.00	.1320	.1020	.0300	24.00	3.05	.2600	1.52	152,000
Sept....	12	...	dec.	dec.	.46	58.9	11.7	47.2	3.20	.1620	.0660	.0960	17.22	.56	.4100	1.80	729,000
Oct.....	11	...	dec.	dec.	.15	52.9	8.7	44.2	4.80	.1000	.0680	.0380	17.23	.59	.1200	1.36	4,713,000
Nov....	14	...	sl.	iron dec.	.26	59.7	16.5	43.2	5.20	.0860	.0780	.0080	16.98	2.47	.0800	1.46	113,500
Dec.....	12	...	dist.	v. sl.	.65	51.8	13.8	38.0	6.48	.1480	.1220	.0260	15.80	1.27	.0320	2.16	543,500
Yearly average.			dec.	dec.	br. .47	62.8	13.0	49.8	5.97	.1970	.1370	.0600	18.70	.79	.0900	2.40	1,106,000

* See also pages 26-27 of this report.

Central Falls Sewage.*

Chemical and Bacteriological Examination of Water taken from stream into which the Effluent of the Central Falls filter beds flows, the sample being taken from the stream at a point two hundred fifty feet below the city line.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.				NITRO- GEN			Oxygen Consumed.	Bacteria per c. c.
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.		
										Total.	In Solution.	In Suspension.					
Jan.....	14	...	dec.	dec.	br.	33.0	11.4	27.6	1.14	.1820	.0820	.1000	6.78	.10	.0600	3.20	132,000
Feb.....	15	...	dec.	dec.	.40	42.7	17.9	24.8	3.12	.2540	.2260	.0280	6.76	.01	.0000	3.39	948,500
Feb.....	24	...	dec.	sl.	br.	19.8	3.6	16.2	1.36	.1280	.0760	.0520	3.70	.30	.0020	1.38	170,000
Mar.....	15	...	dec.	dec.	.31	31.0	6.5	24.5	0.56	.0700	.0300	.0400	5.58	.65	.0700	.76	1,800,000
April....	19	...	dist.	sl.	.80	23.0	5.8	17.2	0.86	.0640	.0540	.0100	4.20	.50	.0300	.73	70,300
May.....	16	...	dist	dist.	.30	31.2	12.9	18.3	0.26	.0380	.0320	.0060	3.98	1.26	.0040	.61	384,400
June....	14	...	sl.	dec.	.41	40.9	10.0	30.9	1.42	.1060	.0480	.0580	7.22	.74	.0320	1.18	589,000
July....	14	...	sl.	sl.	.51	30.5	7.5	23.0	0.92	.0480	.0400	.0080	5.98	.71	.0600	.49	66,600
Aug....	2	...	dec.	dec.	.43	44.2	8.3	35.9	2.60	.1640	.1020	.0620	11.82	.13	.2000	1.25	151,500
Sept....	12	...	dec.	iron dec.	.33	39.7	9.0	30.7	1.30	.0720	.0500	.0220	9.62	.50	.4300	.96	565,500
Oct.....	11	...	sl.	dec.	iron .65	30.8	8.3	22.5	0.94	.0320	.0300	.0020	6.36	.75	.0200	.46	122,500
Nov....	14	...	sl.	iron dec.	.23	45.2	11.2	34.0	2.80	.0520	.0400	.0120	11.02	1.13	.0440	.96	186,500
Dec....	12	...	dec.	dec.	iron .60	46.6	12.3	34.3	3.60	.0860	.0620	.0240	10.56	1.27	.0300	1.42	247,500
Yearly average.			dec.	dec.	.45	35.7	9.6	26.1	1.61	.1000	.0670	.0330	7.20	.62	.0760	1.29	420,000

* See also pages 26-27 of this report.

Woonsocket Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Woonsocket, the sample being taken from the flow in the thirty-six inch sewer.

(Parts per 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			NITRO- GEN.			Oxygen Consumed.	Bacteria per c. c.	
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.			Chlorine.	As Nitrates.			As Nitrites.
										Total.	In Solution.	In Suspension.					
Jan.....	11	...	...	...	...	82.8	41.8	41.0	4.60	1.29	.49	.80	6.80	...	...	11.20	12,920,000
Feb.....	4	...	...	...	...	83.2	51.4	31.8	3.30	1.02	.46	.56	8.80	...	...	14.00	1,510,000
Feb.....	29	...	...	...	...	69.4	39.0	30.4	4.00	.98	.42	.56	7.02	...	...	9.90	3,440,000
Mar.....	14	...	...	...	...	54.6	38.6	16.0	2.50	.55	.25	.30	5.90	...	...	10.90	5,275,000
Mar.....	28	...	...	...	...	72.2	43.0	29.2	3.10	.82	.43	.39	7.20	...	...	10.70	5,745,000
April....	11	...	...	...	...	43.0	28.2	14.8	1.40	.50	.24	.26	3.60	...	...	4.50	3,270,000
April....	25	...	...	...	...	61.0	40.4	20.6	2.60	.60	.32	.28	6.84	...	...	6.90	11,780,000
May.....	9	...	...	...	...	59.2	32.8	26.4	2.90	.88	.21	.67	5.18	...	...	7.10	11,500,000
May.....	31	...	...	...	...	69.2	40.0	29.2	4.10	1.01	.31	.70	7.60	...	...	7.50	7,510,000
June....	15	...	...	...	...	57.8	41.0	16.8	4.10	.71	.38	.33	7.20	...	...	6.30	420,000
June....	30	...	...	...	...	75.8	38.8	37.0	3.90	.83	.37	.46	7.38	...	...	6.70	8,840,000
July....	11	...	...	...	...	107.6	75.4	32.2	3.60	1.02	.49	.53	21.78	...	...	10.30	13,670,000
Aug....	1	...	...	...	...	86.4	59.0	27.4	3.00	1.33	.42	.91	8.70	...	...	10.50	9,070,000
Aug....	22	...	...	...	...	82.8	44.4	38.4	2.60	.87	.42	.45	9.62	...	...	9.00	11,300,000
Sept....	6	...	...	...	...	75.4	47.6	27.8	3.50	.86	.34	.52	7.24	...	...	9.70	4,960,000
Sept....	19	...	...	...	...	76.0	41.6	34.4	3.10	.88	.29	.59	7.20	...	...	8.40	Lost
Oct.....	3	...	...	...	...	73.8	52.6	21.2	4.00	1.07	.38	.69	7.64	...	...	11.30	10,380,000
Oct.....	17	...	...	...	...	89.4	51.4	38.0	4.00	1.08	.36	.72	6.40	...	...	12.50	13,650,000
Nov.....	7	...	...	...	...	78.4	45.6	32.8	3.80	.80	.37	.43	7.78	...	...	9.40	4,930,000
Nov.....	21	...	...	...	...	102.8	61.0	41.8	3.40	1.20	.71	.49	6.36	...	...	12.50	5,570,000
Dec.....	5	...	...	...	...	113.2	50.6	62.6	4.40	1.32	.56	.76	6.62	...	...	15.80	16,490,000
Dec.....	19	...	...	...	...	85.4	43.8	41.6	3.60	1.11	.45	.66	5.60	...	...	11.40	9,980,000
Yearly average.		...	...	...	...	77.2	45.8	31.4	3.43	.94	.39	.55	7.70	...	...	9.80	8,200,400

* See also pages 60 and 61 of this report.

Woonsocket Sewage.*

Chemical and Bacteriological Examination of the Sewage Effluent of the City of Woonsocket, the sample being taken from beds 1—6, at the purification plant of that city.

(Parts in 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPORATION.			AMMONIA.				NITRO-GEN.			Oxygen Consumed.	Bacteria per c. c.	Bed No.
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	Loss on Ignition.	Fixed.	Free.	Albuminoid.			Chlorine.	As Nitrates.	As Nitrites.			
										Total.	In Solution.	In Suspension.						
Jan.....	11 ...	sl.	sl.	.39	23.5	5.1	18.4	1.64	.0880	.....	.....	7.08	.50	.0120	1.15	86,200	Beds 1 and 2.
Feb.....	4 ...	dec.	v. sl.	br.	30.1	9.5	20.6	2.84	.2620	.....	.....	5.98	.09	.0040	2.15	920,600	Beds 1 and 2.
Feb.....	29 ...	dec.	sl.	.50	33.1	6.3	26.8	2.00	.1520	.....	.....	4.02	.02	.0000	1.58	276,000	Bed 2.
Mar.....	14 ...	dec.	v. sl.	.32	44.6	5.4	39.2	1.60	.0900	.....	.....	4.60	.49	.0240	1.11	94,500	Beds 3 and 4.
Mar.....	28 ...	dec.	v. sl.	br.	30.8	9.9	20.9	2.00	.2220	.....	.....	4.18	.11	.0030	2.78	331,800	Bed 4.
April.....	11 ...	dec.	sl.	br.	25.5	6.6	18.9	1.80	.1080	.....	.....	4.38	.15	.0170	1.82	16,350	Bed 4.
April.....	25 ...	sl.	sl.	.40	30.2	11.2	19.0	1.70	.0640	.....	.....	4.76	1.57	.0180	.64	71,500	Bed 2.
May.....	9 ...	v. sl.	0	.26	22.5	6.6	15.9	1.26	.0360	.....	.....	5.00	.41	.0300	.44	114,500	Bed 1.
May.....	31 ...	v. sl.	v. sl.	.21	46.4	24.1	22.3	.40	.0680	.....	.....	6.60	3.07	.0140	.78	102,400	Bed 3.
June.....	15 ...	sl.	v. sl.	.35	47.8	23.8	24.0	1.82	.0700	.....	.....	6.00	3.52	.0020	.65	31,900	.....
June.....	30 ...	sl.	v. sl.	.25	57.6	26.4	31.2	1.30	.0720	.....	.....	8.20	4.39	.0060	.62	102,900	Bed 3.
July.....	11 ...	dist.	sl.	.45	55.9	28.5	27.4	1.40	.0740	.....	.....	7.40	4.04	.0060	.52	15,300	Bed 2.
Aug.....	1 ...	dist.	sl.	.32	37.6	15.1	22.5	.22	.1120	.....	.....	9.50	1.76	.0020	.98	433,500	Bed 4.
Aug.....	22 ...	dec.	v. sl.	.55	33.8	11.5	22.3	.82	.0840	.....	.....	6.32	1.88	.0100	.89	177,500	Bed 1.
Sept.....	6 ...	dec.	v. sl.	.35	32.7	12.0	20.7	.60	.1060	.....	.....	6.66	1.52	.0200	.99	80,500	Bed 3.
Sept.....	19 ...	sl.	dist.	.30	30.5	11.7	18.8	1.10	.0800	.....	.....	5.20	1.66	.0120	.74	Lost	Bed 4.
Oct.....	3 ...	dist.	tr.	.40	29.1	10.9	18.2	.80	.0980	.....	.....	5.78	1.31	.0050	.98	153,500	Bed 3.
Oct.....	17 ...	dec.	sl.	.50	25.6	7.3	18.3	1.80	.1760	.....	.....	5.76	.06	.1600	1.58	1,078,800	Bed 1.
Nov.....	7 ...	dec.	v. sl.	.50	24.4	6.3	18.1	1.80	.1220	.....	.....	5.80	.10	.0800	1.15	365,800	.....
Nov.....	21 ...	sl.	v. sl.	.18	25.5	3.7	21.8	1.62	.0900	.....	.....	5.60	.11	.0360	.90	236,400	Bed 5, new bed.
Dec.....	5 ...	sl.	0	.14	31.2	8.6	22.6	3.20	.0800	.....	.....	6.62	.07	.0600	1.00	104,200	Beds 5 and 6, new.
Dec.....	19 ...	dec.	v. sl.	.45	25.9	7.4	18.5	1.96	.0940	.....	.....	5.70	.62	.0140	1.06	749,000	Beds 4 and 5.
Yearly av.		dec.	v. sl.	.36	33.8	11.7	22.1	1.53	.1067	.....	.....	5.40	1.25	.0243	1.11	254,400	

*See also pages 60 and 61 of this report.

Providence Sewage.*

Chemical and Bacteriological Examination of the Sewage of the City of Providence, the Sample being taken from the crude sewage-flow as received at the Purification Plant at Field's Point.

(Parts in 100,000.)

MONTH.	DATE OF		APPEARANCE.			RESIDUE ON EVAPO- RATION.			AMMONIA.			Chlorine.	NITRO- GEN.		Oxygen Consumed.	Bacteria per c. c.	
	Collection.	Examination.	Turbidity.	Sediment.	Color.	Total.	In Solution.	In Suspension.	Free.	Albuminoid.			As Nitrates.	As Nitrites.			
										Total.	In Solution.						In Suspension.
April....	4	...	...	...	...	131.0	93.2	37.8	2.00	.7800	.3700	.4100	31.80	...	...	15.60	750,000
May....	4	...	...	...	...	96.4	57.6	38.8	1.28	.5680	.2480	.3200	12.40	...	...	7.72	.....
June....	2	...	...	...	...	157.0	128.4	28.6	3.04	.7600	.3240	.4360	31.80	...	...	11.84	1,270,000
July....	11	...	...	...	...	161.2	120.0	41.2	2.96	1.8000	.2400	1.5600	44.60	...	...	6.48	108,000
Aug....	1	...	...	...	...	134.6	100.6	34.0	3.60	1.1800	.3400	.8400	36.70	...	...	8.60	8,010,000
Sept....	1	...	...	...	...	249.6	204.8	44.8	2.24	.6760	.3120	.3640	81.50	...	...	9.62	4,410,000
Oct....	10	...	...	...	...	194.0	157.6	36.4	2.00	.6960	.2640	.4320	78.00	...	...	8.48	910,000
Nov....	9	...	...	...	...	362.0	334.0	28.0	2.48	.7800	.3360	.4440	155.50	...	...	9.40	1,720,000
Dec....	5	...	...	...	...	126.4	67.8	58.6	2.40	.7360	.4120	.3840	28.62	...	...	10.20	1,440,000
Yearly average.						179.1	140.4	38.7	2.44	.0893	.0316	.0577	55.70	...	...	9.77	12,644,300

NOTE.—The sewage has always a strong odor of gas liquor.

Chemical and Bacteriological Examination of the Sewage of the City of Providence, the sample being taken from the effluent leaving the Precipitation Tanks at Field's Point.

April....	4	...	...	...	...	75.4	71.2	4.2	1.60	.3400	.2960	.0440	22.60	...	...	4.64	11,660,000
May....	4	...	...	...	...	63.8	61.8	2.0	1.92	.2760	.2480	.0280	15.36	...	...	3.38	4,519,000
June....	2	...	...	...	...	100.8	96.4	4.4	1.60	.3320	.2200	.1120	32.30	...	...	5.00	3,970,000
July....	11	...	...	...	...	133.6	129.4	4.2	2.88	.3040	.2120	.0920	45.60	...	...	2.80	1,302,000
Aug....	1	...	...	...	...	160.8	155.6	5.2	2.48	.2800	.2000	.0800	60.02	...	...	2.72	978,000
Sept....	1	...	...	...	...	152.6	148.6	4.0	2.40	.3000	.2760	.0240	55.25	...	...	4.56	5,937,000
Oct....	10	...	...	...	...	191.6	186.4	5.2	3.20	.3360	.2120	.1240	61.20	...	...	3.16	4,640,000
Nov....	9	...	...	...	...	251.2	244.8	6.4	2.48	.3680	.3160	.0520	10.30	...	...	4.28	7,430,000
Dec....	5	...	...	...	...	188.0	186.2	1.8	2.88	.4640	.2680	.1960	76.80	...	...	4.96	13,140,000
Yearly av....						146.4	142.3	4.1	2.38	.3330	.2500	.0830	42.20	...	...	3.94	5,953,000

* See also pages 45-46 of this report.

NOTE.—Odor of gas liquor in effluents.

METEOROLOGY.

It has been remarked in previous reports of the Board that the influence of the meteorological conditions of the atmosphere, as well as the floating matter suspended therein, are recognized and acknowledged by all pathologists as causes of diseases; and the following tables are therefore introduced, as heretofore, for the purpose of comparing the large prevalence of certain diseases, at different monthly periods of the year, with the temperature, the atmospheric pressure, the relative humidity, prevailing direction and force of the wind, and other conditions of the atmosphere, and also the amount of cloud and rain-fall during each month of the year. All of the said diseases and monthly prevalence of the same may be found in the report upon the registration of deaths arranged by MONTHS, in Table VII of the Registration Report.

The first table is compiled from the monthly reports of the city engineer of Providence, and shows the mean, maximum, and minimum temperature of the different months, and the extremes and average daily range of the same, the rain-fall, and prevailing direction of the wind.

The second table will give a more comprehensive monthly summary of observations during 1904, including a large number of atmospheric conditions for each month, and also yearly summaries for each of the five preceding years. It is condensed from the annual summary of monthly observations at Hope reservoir and the city hall, in Providence. Similar data, for the years previous to those given in this report, will be found in the report for the year 1902, these figures commencing with year 1883.

TABLE 1.

Temperature, Range of Temperature, Rain-fall, and Prevailing Direction of the Wind for each Month during the year 1904.

(Providence.)

MONTHS.	TEMPERATURE.							Total Amount of Rain or Melted Snow in Inches.	Prevailing Direction of the Wind.
	Monthly Mean.	Maximum.	Minimum.	Monthly Range.	Greatest Daily Range.	Least Daily Range.	Average Daily Range.		
January.....	23.1	49.5	—4.0	53.5	29.0	5.0	14.5	6.45†	N. W.
February.....	24.4	50.0	2.0	48.0	37.5	6.5	16.4	3.38†	N. W.
March.....	36.6	67.5	10.5	57.0	28.0	5.0	15.1	3.92†	N. W.
April.....	46.4	66.5	26.0	40.5	29.0	7.0	16.4	9.45†	N. W.
May.....	63.3	87.0	42.5	44.5	33.0	6.0	19.9	2.37	S.
June.....	67.2	96.0	47.5	48.5	31.5	5.0	20.0	2.46	S.
July.....	73.4	95.0	55.5	39.5	28.0	6.5	18.5	1.06	S.
August.....	70.2	88.0	53.0	35.0	26.5	6.5	16.9	5.12	S.
September.....	63.0	85.5	35.5	50.0	26.0	3.5	17.4	5.34	S.
October.....	50.4	75.0	26.5	48.5	27.0	7.5	16.7	2.11	N. W.
November.....	38.4	57.0	15.5	41.5	33.5	5.5	13.6	1.95†	N. W.
December.....	26.5	48.0	8.0	40.0	31.0	4.5	13.2	4.31†	N. W.
For year.....	48.6	96.0	—4.0	.....	.....	.....	.....	47.92	N. W.

† Snow and rain.

TABLE II.—Summary of Meteorological Observations at Hope Reservoir and City Hall, Providence, for the Year 1901.

MONTHS.	BAROMETER, Reduced to Sea Level, and to 32°.				THERMOMETERS.				RELATIVE HUMID- ITY.	WIND.								WEATHER.					RAIN AND SNOW.				
	Reduced to Sea Level, and to 32°.				THERMOMETERS.					WIND.								WEATHER.									
Mean.				Range.				Mean.				Range.				Mean.				Range.				Amount of rain or melted snow in inches.		Depth of snow in inches.	
Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.	North.	Northeast.	Southeast.	South.	Southwest.	West.	Northwest.	Variable.	Mean velocity.	Clear.	Fair.	Variable.	Rain or snow.	All others.	Mean amount of cloud.	Atmosphere, No. of days it was
January.....	30.01	30.80	29.30	1.50	23.1	49.5	—4.	53.5	74	10	1	1	1	1	3	2	12	....	8	11	4	1	15	0	4.7	6.45†	31.00
February.....	30.04	30.62	29.20	1.42	24.4	50.	2.	48.	69	8	1	0	0	3	2	1	14	....	10	11	3	0	15	0	4.4	3.35†	13.00
March.....	30.06	30.89	29.41	1.48	36.6	67.5	10.5	57.	71	4	0	1	5	6	1	1	13	....	9	6	9	1	15	0	4.9	3.92†	8.00
April.....	29.93	30.49	29.49	1.00	46.4	66.5	26.	40.5	69	3	3	0	2	8	1	2	11	....	8	3	10	0	17	0	5.2	9.45†	2.50
May.....	29.97	30.36	29.56	.80	63.3	87.	42.5	44.5	63*	2	7	1	0	13	6	1	1	....	7	7	9	0	15	0	4.4	2.37	.....
June.....	30.05	30.34	29.53	.81	67.2	96.	47.5	48.5	71	4	6	3	1	8	5	0	3	....	7	4	12	0	14	0	4.9	2.46	.....
July.....	29.98	30.26	29.57	.69	73.4	95.	55.5	39.5	73	3	1	2	2	13	2	1	7	....	7	0	17	0	13	1	5.4	1.06	.....
August.....	30.03	30.43	29.72	.71	70.2	88.	53.	35.	75	2	2	2	1	10	3	2	9	....	6	5	14	0	12	0	5.2	5.12	.....
September.....	30.07	30.60	29.35	1.25	63.0	85.5	35.5	50.	76	3	1	3	1	10	4	1	7	....	6	5	11	2	12	0	4.8	5.34	.....
October.....	30.03	30.51	29.31	1.20	59.4	75.	26.5	48.5	72	5	2	0	2	5	5	2	10	....	7	10	8	2	9	2	4.1	2.11	.....
November.....	29.89	30.52	28.55	1.97	38.4	57.	15.5	41.5	72	9	2	0	0	4	2	2	11	....	7	9	10	2	9	0	3.7	1.95†	3.00
December.....	29.95	30.51	29.07	1.44	26.5	48.	8.	40.	72	9	1	1	0	1	2	7	10	....	8	6	4	2	19	0	5.2	4.31†	22.00
Means for the year.	30.00	.....	.....	1.19	48.6	.....	.....	45.5	72	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	4.7	.....	.....
Totals for the year.	.....	.....	.....	.....	.....	.....	.....	.....	.....	62	27	14	15	82	36	22	108	.....	.....	77	111	10	165	3	.....	47.92	79.50
Extremes.....	.....	30.89	28.55	2.34	96.	.....	—4.	100.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

†Snow and rain.

* "Variable" direction of the wind has not been considered since 1901.

MONTHS.	TEMPERATURE (IN DEGREES FAHRENHEIT).						PRECIPITATION (IN INCHES).						SKY.			WIND. Prevailing direction of the wind.
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snow-fall (un- melted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.	
BLOCK ISLAND.																
January.....	26.2	-4.9	50	23	0	4	29	2.54	-1.66	0.70	13.7	16	12	10	9	N. W.
February.....	25.0	-5.8	49	22	4	16	32	3.12	-1.24	1.59	3.4	10	10	10	9	N. W.
March.....	33.7	-1.1	53	23	13	5	18	1.59	-2.44	0.35	4.1	11	9	12	10	N. W.
April.....	42.2	-1.2	60	25	26	20	21	5.31	+1.90	1.70	1.6	15	8	13	9	S. W.
May.....	55.1	+2.7	69	20	39	3	20	2.40	-1.37	0.97	.....	9	17	10	4	S. W.
June.....	60.8	-1.2	82	26	47	11	20	3.67	-0.09	1.14	.....	12	12	12	5	S. W.
July.....	68.2	-0.2	80	20	58	4	17	2.14	-1.03	1.23	.....	11	13	16	2	S. W.
August.....	67.3	-0.7	77	7	54	27	15	6.80	+3.34	2.53	.....	11	15	11	5	S. W.
September.....	62.6	-1.0	78	4	38	22	17	1.29	-1.62	0.68	.....	7	14	13	3	S. W.
October.....	51.5	-2.1	67	18	30	31	20	1.86	-2.57	0.78	.....	7	15	4	12	S. W.
November.....	40.6	-4.3	56	4	20	29	32	2.11	-2.09	1.36	1.0	8	10	6	14	N. W.
December.....	29.6	-6.6	53	28	12	11	27	2.93	-0.74	0.69	19.9	16	6	9	16	N. W.
Means.....	46.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	35.76	.....	.....	43.7	133	141	127	98	.....
Extremes.....	.....	.....	82	.....	0	.....	32	.....	.....	2.53	.....	.....	.....	.....	.....	S. W.

KINGSTON. §

January.....	20.6	-7.1	48	23	-16	5	36	5.45	+0.35	1.05	24.5	12	9	10	W.
February.....	21.6	-6.3	48	22	-4	16	32	4.21	-1.09	2.28	9.5	9	13	9	W.
March.....	32.8	-1.5	60	23	5	5	26	2.88	-2.63	0.99	6.0	10	11	8	W.
April.....	43.0	-1.8	66	†25	20	4	35	9.70	+5.47	2.03	1.5	14	7	15	W.
May.....	57.8	+2.8	81	26	35	3	31	3.17	-1.40	1.25	.....	11	16	8	S. W.
June..	62.0	-2.5	92	26	40	11	31	4.44	+1.81	1.38	.....	10	11	10	S. W.
July	68.3	-0.9	87	19	48	3	31	2.47	-1.29	1.03	.....	9	10	13	S. W.
August.....	66.2	-2.4	83	7	45	27	28	7.63	+3.53	2.48	.....	8	12	10	S. W.
September.....	60.6	-1.8	82	4	29	22	29	1.97	-1.89	1.33	.....	10	12	12	S. W.
October.....	48.2	-2.6	78	18	20	31	38	2.30	-3.21	1.35	.....	4	16	8	W.
November.....	35.4	-5.7	57	4	7	29	42	3.15	-1.93	2.10	1.8	5	15	12	W.
December.....	23.2	-8.5	30	28	4	†11	28	4.97	+1.24	1.65	28.0	11	7	15	W.
Means.....	45.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	52.34	.....	.....	71.3	113	142	129	95
Extremes.....	.....	.....	92	.....	-16	.....	42	.....	.....	2.48	.....	.....	.....	.....	W.

MELVILLE.

January.....	22.0	.....	51	23	-7	19	31	4.87	.....	0.66	21.5	12	15	5	11	N. W.
February.....	22.8	.....	47	22	-2	16	30	3.61	.....	2.00	8.5	7	13	5	11	N. W.
March.....	35.1	.....	61	24	7	5	30	1.63	.....	0.64	1.5	7	14	8	9	N. E.
April.....	44.4	.....	65	26	20	17	31	8.80	.....	2.92	T.	14	11	14	5	S. W.
May.....	58.6	.....	76	†24	35	3	30	2.42	.....	0.73	.....	8	17	9	5	S. W.

NARRAGANSETT PIER.

January.....	22.6	-5.5	53	30	-10	5	48	3.40	-1.61	0.70	20.0	16	16	3	12	W.
February.....	23.2	-5.8	48	22	1	16	31	2.73	-1.84	1.15	10.0	9	13	5	11	N. W.
March.....	34.0	-0.4	69	23	6	4	36	2.06	-2.52	0.74	6.5	10	15	4	12	N. E.
April.....	42.0	-2.7	60	25	22	17	26	7.69	+4.16	2.89	0.5	17	11	8	11	S. E.
May.....	56.0	+1.0	72	†10	35	3	26	4.20	-0.05	1.60	.....	9	17	7	7	S. W.
June.....	61.7	-2.7	86	26	41	†11	29	3.63	+1.32	0.96	.....	14	18	4	8	E.
July.....	68.4	-1.5	88	20	50	4	26	2.77	-0.55	1.02	.....	12	20	5	6	S.
August.....	66.8	-2.1	82	7	48	24	24	5.89	+1.84	1.76	.....	11	18	4	9	.....
September.....	61.5	-1.2	80	4	32	22	26	2.18	-1.09	0.64	.....	11	16	8	6	.....
October.....	49.2	-3.0	70	18	25	31	31	1.75	-2.79	0.75	.....	7	18	4	9	W.
November.....	36.9	-6.2	58	4	9	29	42	2.88	-1.48	1.34	3.0	7	15	1	14	W.
December.....	25.2	-8.3	52	28	6	†14	32	3.50	-0.02	0.75	23.0	12	10	5	16	N. E.
Means.....	45.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	42.68	.....	.....	63.0	135	187	58	121	.....
Extremes.....	.....	.....	88	.....	-10	.....	48	.....	.....	2.89	.....	.....	.....	.....	.....	W.

PROVIDENCE, §

January.....	23.2	-4.9	50	23	-4	19	29	6.45	+2.34	1.20	31.0	13	.....	.....	.....	.....
February.....	23.7	-5.4	50	†7	2	16	38	3.38	-0.46	1.65	13.0	8	.....	.....	.....	.....
March.....	35.8	+0.7	68	26	10	5	29	3.92	-0.19	1.35	8.0	10	.....	.....	.....	.....
April.....	47.0	0.0	67	30	26	20	29	9.45	+5.81	1.20	2.5	13	.....	.....	.....	.....
May.....	64.6	+6.4	87	26	42	3	33	2.37	-1.38	1.69	.....	12	.....	.....	.....	.....

Meteorological Observations for the Whole State for 1904.

(CONTINUED.)

MONTHS.	TEMPERATURE (IN DEGREES FAHRENHEIT).						PRECIPITATION (IN INCHES).					SKY.			WIND.
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snow-fall (unmelted).	Number rainy days.	Number clear days.	Number partly cloudy days.	Prevailing direction of the wind.
June.....	68.6	+0.4	96	26	47	110	29	2.46	-0.74	0.55	.....	11	.....	.....	.....
July.....	75.2	+2.2	95	19	55	4	28	1.06	-2.17	0.25	.....	8	.....	.....	.....
August.....	71.3	+0.5	85	1	53	27	25	5.12	+0.96	2.10	.....	6	.....	.....	.....
September.....	64.2	+0.4	86	12	35	23	27	5.34	+2.10	3.78	.....	9	.....	.....	.....
October.....	50.5	-1.9	75	18	26	31	28	2.11	-1.63	1.00	.....	6	.....	.....	.....
November.....	38.2	-4.4	57	20	15	29	34	1.95	-2.34	1.54	3.0	6	.....	.....	.....
December.....	24.6	-8.6	48	23	8	11	31	4.31	+0.48	1.10	22.0	11	.....	.....	.....
Means.....	48.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	.....	.....	.....	.....	.....	.....	.....	47.92	.....	.....	79.5	113	.....	.....	.....
Extremes.....	.....	.....	96	.....	-4	.....	38	.....	.....	3.78	.....	.....	.....	.....	.....

PROVIDENCE.—Concluded.

AVERAGES, ETC., FOR 1904.

Block Island.....	46.9	82	.....	.....	32	35.76	.....	2.53	43.7	133	141	127	98	S. W.
§Bristol.....	46.8	85	.....	—5	29	39.45	.....	2.50	65.0	126	185	101	80	S. W.
§Kingston.....	45.0	92	.....	—16	42	52.34	.....	2.48	71.3	113	142	129	95	W.
12 Melville.....	46.6	94	.....	—7	38	41.79	.....	2.92	49.5	102	188	98	80	S. W.
Narragansett Pier.....	45.6	88	.....	—10	48	42.68	.....	2.89	63.0	135	187	58	121	W.
§Providence.....	48.9	96	.....	—4	38	47.92	.....	3.78	79.5	113	.....	.....	.....	.....

All records are used in determining state (or district) means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observations.

§ Thermometers not supplied by Weather Bureau.

† On other dates also.

T indicates Trace

BIRTHS, DEATHS, AND MARRIAGES, 1904.

The value of reliable reports, in their various bearings, relating to the records of births, marriages, and deaths, and the items of fact connected therewith, showing the vital movements of the population from year to year, has been so frequently presented in the previous reports of this Board as to need no repetition at this time. It is gratifying, however, to be able to state that, with no exception, persons eminent in social and political science everywhere recognize the indispensable information such reports furnish, and that in every civilized country they occupy places of importance in the government reports second to no other department.

The fifty-first report (1903) on registry of vital movements in Rhode Island was completed and issued by the end of the year, and will be found appended to this report.

The work of collecting the data for the fifty-second report (1904), the enumerating, classifying, arranging, and collecting in tables for the purpose of presenting the various facts in such detail as to facilitate examination and study, has been in progress during the time of making up this report, and affords some facts which may be presented at this time.

Below will be found some of the general results of the registry of births, marriages, and deaths during 1904.

BIRTHS.	
SEX.	PARENT NATIVITY.
Males.....	Native*.....
6,175	4,642
Females.....	Foreign.....
5,901	7,434
Whole number of births.....	
12,076	

* Including all whose fathers were born in the United States, whether the fathers were of foreign or native parentage.

MARRIAGES.

Native born Groom and Bride.....	1,916
Foreign born Groom and Bride.....	1,342
Native Groom and Foreign Bride.....	453
Foreign Groom and Native Bride.....	463

Whole number of marriages..... 4,174

Native Grooms.....	2,369	Foreign Grooms.....	1,805
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DEATHS.

SEX.		NATIVITY.	
Males.....	4,143	Native.....	5,673
Females.....	3,964	Foreign.....	2,434

Whole number of deaths..... 8,107

There was one birth to every 38.8 of population, or.....25.8 births in every 1,000
 One person married in every 56.1 of population, or.....17.8 persons married in every 1,000
 And one death in every 57.8 of population, or.....17.3 deaths in every 1,000
 Population in 1904 was..... 468,676

BIRTHS, MARRIAGES, AND DEATHS PER 1,000 OF POPULATION IN 1904.

Birth rates.....	25.8
Death rates.....	17.3
Excess of birth rates over death rates.....	8.5
Marriage rates.....	17.8
Ratio of number of marriages.....	8.9

The following Summary will show the rates, per 1,000 of the population, of births, marriages, and deaths for eighteen years.

	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Birth-rates.....	24.2	24.2	24.1	24.7	26.5	25.2	26.5	26.6	25.7	27.3	26.8	25.9	25.6	25.9	25.8	25.1	25.3	25.8
Death-rates.....	19.9	20.4	19.0	20.1	18.6	20.1	19.6	19.5	19.6	19.1	17.6	16.7	17.6	20.6	18.2	17.8	18.5	17.3
Excess of birth-rates over death-rates	4.2	3.8	5.1	4.6	7.9	5.1	6.9	7.1	6.1	8.2	9.2	9.2	8.0	5.3	7.6	7.3	6.8	8.5
Marriage-rates.....	18.0	18.7	18.4	18.5	18.7	19.1	18.7	17.4	18.2	17.0	15.6	15.8	16.2	18.4	17.6	18.5	19.2	17.8
Ratio of number of marriages.....	9.0	9.3	9.2	9.3	9.3	9.6	9.4	8.7	9.1	8.5	7.8	7.9	8.1	9.2	8.8	9.3	9.6	8.9

The following table will present the number, parentage, and proportion to total mortality of deaths from several of the most prominent causes of death, in their order of precedence:

	Whole No. of deaths.	Percentage of deaths from all causes.	Parentage.		Excess of Foreign over Native.
			Native.	Foreign.	
Tuberculous Diseases.....	981	12.10	307	674	367
Pneumonia.....	898	11.08	345	553	208
Heart Diseases.....	723	8.91	342	381	39
Kidney Diseases.....	618	7.62	249	369	120
Cholera Infantum.....	598*	7.38	202	396	194
Apoplexy and Cerebral Hemorrhage	460	5.67	214	246	32
Cancer.....	401	4.95	187	214	27
Accidents.....	321	3.96	116	205	89
Bronchitis.....	236	2.91	82	154	72
Brain Diseases.....	235	2.90	102	133	31
Old Age.....	196	2.41	121	75	—46
Diphtheria.....	139	1.71	62	77	15
Enteritis.....	100‡	1.23	35	65	30
Liver Diseases.....	97	1.20	39	58	19
Influenza.....	77	0.95	36	41	5
Typhoid Fever.....	74	0.91	29	45	16
Dysentery.....	71	0.88	26	45	19
Scarlet Fever.....	71	0.88	37	34	—3
Diabetes.....	70	0.86	40	30	—10
Appendicitis.....	44	0.54	15	29	14
Measles.....	15	0.18	8	9	1
Whooping Cough.....	8	0.10	1	7	6

LONGEVITY OF DECEDENTS.

	1901.	1902.	1903.	1904.
Average age in years of Male decedents.....	35.01	34.32	32.94	35.08
Average age in years of Female decedents.....	38.07	36.70	35.96	39.77
Average age in years of All decedents.....	36.51	35.49	34.40	37.37

There has been a gradual increase during the last forty-four years in the average length of life of decedents; taking five-year periods, the figures increase from twenty-nine and thirty-two one-hundredths years, for the period from 1861-1865, to thirty-five and fifty-three one-hundredths years for the period from 1896-1900.

* Includes Diarrheal diseases under 2 years.

‡ Includes Diarrheal diseases over 2 years.

RATIOS OF MORTALITY.

There has been the usual variation in the amount of mortality from the more important diseases. Cancer, however, as a cause, increases. The surgeon has greater opportunities for determining that a particular tumor is of a distinctive type, and the physician has been furnished with many new diagnostic possibilities. There was a decrease of 47 deaths from consumption from the previous year, but the percentage to whole number of deaths remains about the same; and while there is a constant actual decline in the number of deaths from tuberculosis, yet many diseases which were reported as from some other cause were tuberculous. The awakening to the prevalence of this disease has now led to a more correct diagnosis. A decrease in the number of deaths from influenza during the year 1904 is noticeable, there being 65 less deaths than in 1903.

Diseases of the heart are often associated with disease of the kidneys, and the physician signing the death return may give prominence to one of these as a primary cause, since this may be uppermost in his mind. It may be at times that the presence of disease of the kidneys, as shown by the physical signs, may be more readily ascertained than pathological changes in an examination of the heart. Often both causes are given, and as statisticians have not agreed upon a selection of either as of the major importance, the compiler may unwittingly lean to a preference. During 1904 there were 618 deaths from disease of the kidneys, which is but one more than the number in 1903.

The invasion of the micro-organisms producing influenza into different parts of the system, in many cases may have caused inflammatory symptoms which were not distinguishable from some other disease. When the lung is invaded we may have a "congestive pneumonia." This may in part account for the 898 deaths classed as pneumonia as against 870 in the year previous, making the largest number ever recorded in the State.

Scarlet fever, as it does at certain periodical intervals, asserted

itself in an increased spread and with increased severity. In 1903 there were twice as many deaths from scarlet fever as during the previous year, and in 1904 there was an increase of eleven over the number in 1903. The last period of high mortality from this disease occurred in the years 1893-1895.

Small pox, which had spread throughout the State in 1902, causing 35 deaths, had abated in the actual number of cases and the number of deaths had fallen to only 3 in 1903, and in 1904 no deaths from this cause were recorded.

The following figures and references give a more detailed comparison of the presence of these several diseases:

APOPLEXY AND CEREBRAL HEMORRHAGE.—There were 66 more deaths from apoplexy in 1904 than in 1903. The number of deaths, taken in five-year periods from these causes has been steadily increasing for the past thirty-nine years.

BRONCHITIS.—There was a decrease of twenty-nine from the number of deaths from bronchitis in 1903. (See Reg. Rep. for 1904.)

CANCER.—The deaths from cancer in 1904 numbered 401 as against 350 in 1903, and 341 in 1902.

CHOLERA INFANTUM.—There were 598 deaths from cholera infantum in 1904, which was 40 less than the number in 1903. The proportion to whole number of deaths was 7.38 per cent.; in 1903 the proportion to whole number of deaths was 7.38 per cent., or the same as in 1904.

CONSUMPTION.—There were 981 deaths from tuberculous diseases in 1904. These include 793 from pulmonary tuberculosis, 33 from general tuberculosis, 38 from abdominal tuberculosis, 86 from tuberculous meningitis, 6 from laryngeal tuberculosis, and 25 from tuberculosis of other organs. (See Reg. Rep. for 1904.)

DIPHTHERIA.—This disease had a mortality of 139 in 1904, which number was 50 less than in 1903; 122 of these deaths were in Provi-

dence county, 87 being in Providence city. The percentage to the whole number of deaths was 1.71.

FEVER, TYPHOID.—There were but 74 deaths from typhoid fever in 1904 as against 86 in 1903, and 91 in 1902. Typhoid fever, as a disease and a cause of death, has gradually lessened in both proportions, as compared with other important diseases, during the last twenty years.

HEART, DISEASES OF.—The deaths from diseases of the heart in 1904 numbered 723, against 726 in 1903. Diseases of this organ have been gradually increasing in the last thirty-nine years. See Table LXXVIII, page 225, Reg. Rep. (1904).

INFLUENZA.—The number of deaths reported from this disease in 1904 was 77, a decrease of 45 per cent. from the number in 1903.

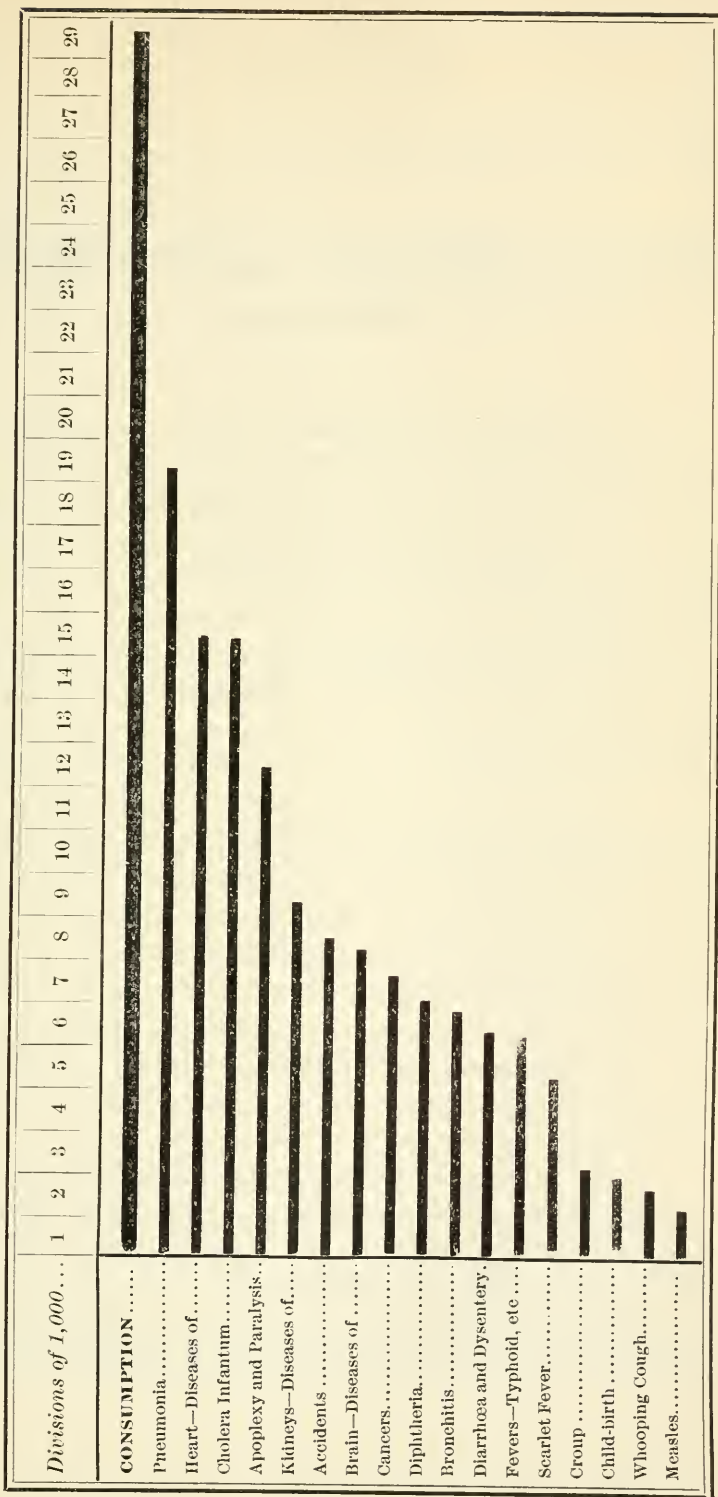
KIDNEYS, DISEASE OF.—The number of deaths from diseases of the kidneys in 1904 was 618, the largest number ever recorded in this State. Kidney disease has been gradually assuming large importance as a cause of death during the last thirty-nine years. The ratio of mortality for the five years 1900–1904 was more than seven times as large as the ratio of the years 1866–1870. See Table LXXXI, page 235, of Reg. Rep. (1904).

PNEUMONIA.—The number of deaths caused by pneumonia in 1904 was 898 against 870 in 1903. The largest number ever recorded in this State was 966 in 1900. See Reg. Rep., 1904, Table LXXXVI, page 245.

SCARLET FEVER.—There were 71 deaths recorded in 1904 from scarlet fever. This was eleven more than the number in 1903. Scarlet fever has, however, largely decreased in epidemic prevalence and proportion of mortality during the last fifteen years as compared with previous periods of fifteen years each.

SMALL POX.—No deaths from small pox occurred in 1904.

Diagram exhibiting the comparative mortality by absolute number of deaths from eighteen principal causes of death in Rhode Island for thirty-nine years, 1866-1904.



REPORT OF CONTAGIOUS DISEASES DURING THE YEAR 1904.

For the purpose of ascertaining the comparative prevalence of the more common communicable diseases, the health officers of the several towns are requested to report monthly to the State Board of Health all cases of diphtheria, scarlet fever, typhoid fever, measles, and other communicable diseases which may have occurred during the month previous.

The health officers are supplied with return addressed postals for this purpose, and the postals are forwarded to them each month as a reminder.

Many of them report regularly. Others do not report, as they have no record of cases. The physicians in many towns, although aware of the existence of ordinances requiring the reporting of contagious and infectious diseases, do not report the cases occurring in their practice. This is because, in the first place, they have so few cases that they postpone the report until it is already known to the town people and to the health officer by town rumor. In some cases the physicians object to reporting to a health officer who is not a physician. In several towns the health officer is merely a nuisance inspector and may be engaged in the occupation of a grocer, plumber, or undertaker.

As no result or benefit will accrue from reporting the case under these conditions, it appears useless to the doctor to report. No inspection will be made, no placard placed, no instructions or precautions will be given by the health officer.

In fact, the physician, in the presence of an epidemic, is more apt to report to the secretary of the State Board of Health. If advised

to report to the local health officer, that he may immediately compare these cases with others reported, the question is asked if there is any health officer and who he is.

Some physicians object to having a mechanic or an undertaker call upon the family in connection with his case, as he does not believe that any additional sanitary directions can be given than those which he has already given to the family.

The proportion of cases reported and those neglected are about the same each year. However, the figures as tabulated are more accurate, beginning with the year 1904, but from year to year those reported serve as a fair comparison.

By observation of the following tables it will be noted that in 1904 there were 1,136 cases of diphtheria, which was 218 more than the number reported during the previous year, which was 918. The average for the ten years previous to 1904 was 653. This makes the number for 1904, 483 more than the average.

In 1904 there were reported 1,816 cases of scarlet fever, 1,056 more than in 1903 and 1,098 more than the average for the previous ten years.

Typhoid fever prevailed to the number of 229 cases, which was 75 less than the number reported in the previous year and 124 less than the average for the previous ten years.

There were reported only 274 cases of measles in 1904, which number was 870 less than the year before and 498 less than the average for the two years preceding.

The wave of small-pox which had visited the state in 1901-1903 had passed over.

The prevalence of these diseases during one year more than another does not give the significance that would appear at first sight.

It permits of comparison of the number of cases with other prevailing conditions, such as season, climatic conditions, etc. By such comparison it permits of the deduction that the spread of the disease is dependent upon local conditions or association of individuals; thus the difference in season may be varied only because individuals

are more closely brought in contact with each other, as the schools are open during winter months only. In the summer months the individual is prone to travel, and through coming in contact with the dejections of many individuals at country farms and watering places, through transmission by flies and other insects, or by contaminated drinking-water, become infected with typhoid fever.

All the figures in this connection go to emphasize the fact that prevalence of these diseases means individual and direct contact of the person with the disease in another, sometimes a milder, form, or with the excreta or secretions from an original case.

The deductions made in the report of the superintendent of health of the city of Providence, give a precise study of the influence of these conditions.

DIPHThERIA FOR 1904.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....	0	0	1	0	0	0	1	0	0	0	0	0	2
Bristol.....	1	1	0	1	4	2	0	4	0	10	7	1	31
Warren.....	0	0	0	0	1	3	1	0	0	0	0	0	5
Coventry.....	0	0	1	2	0	0	0	0	0	0	0	0	3
East Greenwich.....	1	0	0	0	0	0	0	0	0	10	4	12	27
West Greenwich*.....	4	4	2	2	2	1	1	0	0	2	1	0	19
Warwick.....													
Jamestown.....													
Little Compton.....									0	0	0		0
Middletown.....	0	0	5	0	0	0	0	0	0	0	0	0	0
Newport.....	28	8	1	0	2	2	1	3	3	2	2	3	33
New Shoreham.....	0	4	1	0	0	0			0	0	0		5
Portsmouth.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Tiverton.....	1	0	0	0	0	0	0	0	0	1	0	0	2
Burrillville.....							3		1			7	11
Central Falls.....	2	0	0	0	1	0	0	1	3	0	0	1	8
Cranston.....	3	4	6	8	0	0	0	0	0	4	11	1	37
Cumberland.....	0	0	1	2	3	0	0	1	1	4	0		12
East Providence.....	5	8	3	3	7	3	4	3	5	5	7	2	55
Foster.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Glocester.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston.....	0	0	0	0	0	0	0	0	0	7	1	2	10
Lincoln.....			0	0								4	4
North Providence.....	0	0	1	1	0	0	0	0	0	2	0	0	4
North Smithfield.....	1	0	1	1	1	0	1	0	2	1	4	2	14
Pawtucket.....	11	3	1	4	10	4	0	3	4	12	3	6	61
Providence.....	58	53	71	53	31	57	43	52	81	95	90	96	780
Scituate.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithfield.....	1	1	0	0	0	0	0	0	0	0	0		2
Woonsocket.....	1	4											5
Charlestown.....	0	1	0	0	0	0	0	1	0	0	0	0	2
Exeter*.....													
Hopkinton.....	0	0	0	0	0	0	0	0	0	0	0	1	2
Narragansett.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Kingstown.....	1	0	0	0	0	0			0	0	0	0	1
Richmond.....			0	0	0	0			0	0	0	0	0
South Kingstown.....	0	0	0	0	0	0	0	1	0	0	0	0	1
Westerly.....													
Total.....	92	91	94	77	63	72	55	69	100	155	130	138	1136
Total, 1903.....	75	48	56	45	64	57	64	60	72	112	136	129	918
" 1902.....	53	49	50	35	40	19	20	29	45	50	108	66	564
" 1901.....	71	55	81	31	43	61	19	23	23	77	121	69	674
" 1900.....	56	32	29	28	23	30	26	21	30	53	78	100	506
" 1899.....	18	23	22	11	19	25	16	14	23	35	41	51	298
" 1898.....	54	46	31	30	28	19	13	6	12	34	39	31	343
" 1897.....	103	47	67	59	61	48	38	59	77	147	117	70	893
" 1896.....	117	76	74	108	70	49	53	45	69	121	114	125	1,021
" 1895.....	62	33	31	26	50	35	55	52	100	137	227	164	972
" 1894.....	35	17	31	22	41	32	7	10	23	33	32	58	341

* Has no health officer.

SCARLET FEVER FOR 1904.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....	3	1	1	2	0	0	2	0	0	0	0	0	9
Bristol.....	30	27	27	6	5	3	0	0	0	0	0	0	98
Warren.....	1	0	7	3	2	0	0	0	0	0	0	0	13
Coventry.....	0	0	0	0	0	0	0	0	1	0	0	1	2
East Greenwich.....	0	1	0	1	0	0	0	0	0	0	0	0	2
West Greenwich*.....	7	3	5	4	3	3	4	2	1	4	6	8	50
Warwick.....													
Jamestown.....									0	0	0		0
Little Compton.....									0	0	0		0
Middletown.....	0	0	0	0	0	1	0	0	0	0	0	0	1
Newport.....	0	1	3	1	4	2	2	3	3	8	3	14	44
New Shoreham.....	0	10	4	2	3	2			0	0	0		21
Portsmouth.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Tiverton.....	0	0	0	0	1	0	0	0	0	0	0	0	1
Burrillville.....							0		0			1	1
Central Falls.....	3	3	5	2	6	6	5	4	0	0	0	2	36
Cranston.....	6	7	12	14	8	9	0	0	3	0	1	2	62
Cumberland.....	0	0	0	1	0	1	1	3	0	1	1		8
East Providence.....	11	3	11	8	4	8	1	0	1	1	6	4	58
Foster.....	0	0	0	0	0	0	0	0	1	0	0	0	1
Glocester.....	0	0	0	0	0	0	0	0	0	0	5	0	5
Johnston.....	0	4	4	3	0	2	3	4	1	0	2	1	24
Lincoln.....													0
North Providence.....	0	3	0	0	0	0	0	0	0	1	1	0	7
North Smithfield.....	3	2	0	0	0	0	0	2	1	0	2	1	11
Pawtucket.....	15	21	13	13	6	2	5	2	2	3	14	16	112
Providence.....	183	159	210	225	125	94	40	23	32	30	38	61	1220
Scituate.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithfield.....	0	0	0	1	2	2	0	0	0	2	0		7
Woonsocket.....	1	2											3
Charlestown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Exeter*.....													
Hopkinton.....	0	0	0	0	0	0	1	2	2	0	0	5	10
Narragansett.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Kingstown.....	1	0	0	4	1	0			1	0	0	0	7
Richmond.....			0	0	0	0			0	0	0	0	0
South Kingstown.....	0	1	1	0	0	1	0	0	0	0	0	0	3
Westerly.....													
Total.....	264	248	303	291	170	136	64	45	49	50	79	117	1816
Total, 1903.....	59	49	60	57	88	68	61	51	42	58	64	103	760
" 1902.....	68	42	72	68	79	33	12	30	18	46	32	50	550
" 1901.....	59	48	59	52	54	29	26	35	94	76	66	66	657
" 1900.....	88	55	68	119	54	53	20	20	22	49	76	58	682
" 1899.....	33	46	48	20	43	30	25	23	65	68	91	15	607
" 1898.....	66	57	47	40	58	48	15	25	26	79	66	45	572
" 1897.....	80	47	47	51	34	57	41	35	42	77	53	63	629
" 1896.....	78	97	61	72	48	30	29	28	33	46	92	87	701
" 1895.....	168	132	118	123	69	78	56	47	55	63	87	91	1,087
" 1894.....	133	95	91	70	71	53	33	33	58	77	103	122	939

* Has no health officer.

TYPHOID FEVER FOR 1904.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....	0	0	0	0	0	0	0	1	0	0	0	0	1
Bristol.....	0	0	0	0	0	0	0	0	2	1	0	0	3
Warren.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Coventry.....	0	0	0	0	0	0	0	0	0	0	0	0	0
East Greenwich.....	0	0	0	0	0	0	0	0	0	1	1	0	2
West Greenwich*.....	2	0	0	0	1	0	0	0	0	1	1	0	5
Warwick.....													
Jamestown.....													
Little Compton.....									0	0	0		0
Middletown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Newport.....	0	1		2	1	3	1	14	14	10	4	4	54
New Shoreham.....	0	0	0	0	0	0			0	0	0	0	0
Portsmouth.....	0	0	0	0	0	0	0	3	1	1	0	0	5
Tiverton.....	0	0	0	0	0	1	0	0	0	0	0	0	1
Burrillville.....							0		0			1	1
Central Falls.....	0	0	0	0	1	0	0	0	1	5	1	0	8
Cranston.....	0	0	0	0	1	0	0	0	1	1	2	2	7
Cumberland.....	0	1	0	0	0	0	0	0	1	1	0		3
East Providence.....	0	0	0	0	0	1	0	0	1	0	0	1	3
Foster.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Glocester.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston.....	0	1	0	0	0	0	0	0	0	0	0	0	1
Lincoln.....													
North Providence.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Smithfield.....	0	0	0	0	0	0	0	1	1	1	3	1	8
Pawtucket.....	0	0	0	0	2	0	0	0	2	1	0	0	5
Providence.....	5	6	5	4	2	6	5	19	11	17	20	6	106
Scituate.....	1	0	0	0	0	0	0	0	0	0	0	0	1
Smithfield.....	0	0	0	0	0	0	0	0	0	0	0		0
Woonsocket.....	0	0											0
Charlestown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Exeter*.....													
Hopkinton.....	0	0	0	0	0	0	0	0	0	0	0	1	1
Narragansett.....	0	0	0	0	0	0	0	0	0	0	2	1	3
North Kingstown.....	0	0	1	0	0	0			0	1	0	2	4
Richmond.....			0	0	0	0			0	0	0	0	0
South Kingstown.....	1	0	0	0	0	0	0	1	2	1	0	2	7
Westerly.....													
Total.....	9	9	6	6	8	11	7	39	37	42	34	21	229
Total, 1903.....	23	9	18	18	19	13	20	33	31	49	37	34	304
" 1902.....	11	4	23	9	15	17	25	36	51	60	74	42	367
" 1901.....	19	17	14	14	12	12	8	24	35	48	43	45	291
" 1900.....	12	7	11	6	10	16	9	27	71	171	83	52	475
" 1899.....	7	8	13	5	10	10	24	40	89	50	32	38	326
" 1898.....	20	20	33	18	10	6	8	16	28	39	25	28	251
" 1897.....	18	9	6	8	12	9	5	21	33	39	35	35	230
" 1896.....	33	17	21	14	9	13	19	46	65	31	31	26	325
" 1895.....	104	35	15	18	8	13	30	25	34	46	53	90	471
" 1894.....	61	27	54	23	25	14	13	54	59	76	55	31	492

* Has no health officer.

MEASLES FOR 1904.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For Year.
Barrington.....	6	2	0	0	0	0	0	0	0	0	0	0	8
Bristol.....	0	1	0	1	0	0	0	0	0	0	0	0	2
Warren.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Coventry.....	0	0	0	1	0	0	0	0	0	0	0	0	1
East Greenwich.....	0	0	0	0	0	0	0	0	0	0	0	0	0
West Greenwich*.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Warwick.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Jamestown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Compton.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Middletown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Newport.....	0	0	0	5	10	5	1	1	0	0	0	0	22
New Shoreham.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Portsmouth.....	0	0	0	0	0	0	0	0	0	0	0	1	1
Tiverton.....	1	1	3	0	0	1	0	1	0	0	0	0	7
Burrillville.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Central Falls.....	0	5	0	0	10	6	0	0	0	0	0	0	21
Cranston.....	1	0	2	4	9	6	0	0	0	0	3	0	25
Cumberland.....	0	0	0	0	0	0	0	0	0	0	0	0	0
East Providence.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Foster.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Glocester.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Providence.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Smithfield.....	5	1	2	4	3	1	0	3	4	2	7	2	34
Pawtucket.....	17	1	3	3	0	1	0	0	0	0	0	0	25
Providence.....	23	26	7	11	14	2	3	0	2	3	5	9	105
Scituate.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithfield.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Woonsocket.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Charlestown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Exeter*.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Hopkinton.....	0	0	1	4	2	1	0	0	0	0	0	0	8
Narragansett.....	0	0	0	0	0	0	0	0	0	0	0	0	0
North Kingstown.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Richmond.....	0	0	4	8	0	0	0	0	0	0	0	0	12
South Kingstown.....	0	0	0	2	1	0	0	0	0	0	0	0	3
Westerly.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Total.....	53	37	22	43	49	23	4	5	6	5	15	12	274
Total, 1903.....	57	103	152	248	239	196	44	7	17	24	24	33	1,144
" 1902.....	100	72	20	18	9	13	3	3	15	79	38	30	400

* Has no health officer.

TUBERCULOSIS.

EXAMINATIONS OF SPUTUM.

The examination of specimens of sputum expectorated by persons who are suspected of being afflicted with pulmonary tuberculosis has long been established as a routine method of assistance in making or confirming a diagnosis of the presence of that disease.

The Board introduced this means of assistance to physicians in their daily work in 1894.

It is understood by those who utilize the test that the finding of the organisms of tuberculosis is of positive value. Also that the absence of the tubercle bacillus in a given specimen of sputum does not signify that the disease tuberculosis is absent.

It can be readily understood that the person affected may have only a small lesion or that the sputum discharged may be saliva and not coughed up, that the secretions from the lungs may come from any portion of raw inflamed surface or that the organisms present may be held in a mass of thickened tissue, and do not happen to escape in this particular specimen at the time of coughing.

When a negative result is found the physician sends in a second specimen for examination, if from the clinical symptoms he continues to believe that tuberculosis is present.

It is assumed that these examinations have a necessary place in the work of a board of health from the fact that, the disease being a communicable one, it is the duty of boards of health to ascertain the presence of all cases and by warning, prevent those who have the disease from communicating it to others.

The average physician is not, and can not be, properly equipped with the paraphernalia to examine a case which may occur in his practice only occasionally. He has been fully instructed as to the

meaning of the presence or absence of the organism. In many of the schools instruction and actual laboratory practice is given in examining sputum for the organism, but it is impossible for him to carry the staining solutions necessary or to take the time for the examination.

The bacteriological laboratory of the State Board of Health, fully equipped with the necessary paraphernalia and with daily experience in examinations, is in a position to give a prompt report as to the result of an examination.

The examination is usually made within twenty-four hours of receiving the specimen, and is reported to the physician having the case in charge, the following day.

A card catalogue record of these results is kept for reference for the department only.

The result of an examination is never given upon the request of any person except the physician sending in the specimen, or by some person by him authorized to receive the report.

It is the purpose of the Board that these reports be protected securely from the curious friend or neighbor.

Likewise, a report to the patient himself is refused on the ground that a misinterpretation of the result may follow to the detriment of the patient and danger to the public. If he receives the report that no tubercle bacilli were found, he may assume that the disease is absent and take no further precautions. If he has the report of a positive finding, he may at once assume a line of treatment with quack remedies; he may become despondent and refuse to seek aid of any kind. If he must ascertain the result from the physician whom he has consulted, an opportunity is offered at least, to give sound advice in the presence of the disease and in case of a negative result with suspicious clinical symptoms to advise and obtain a second examination of the sputum.

Destructible spit-cups have been furnished free by this department to patients applying for the same, and a large number have availed themselves of this privilege.

In addition to the card catalogue maintained to record the results of examination of sputum, a similar catalogue of all the deaths which are the result of tuberculosis is preserved for reference.

The association of T. B. +, or the finding of tubercle bacilli in a specimen of sputum from a certain person, is followed perhaps in a few months or a year by the record of his death, on a blue card.

The deaths have been thus recorded since 1894, and are a source of study to those interested in the subject.

Many cases will occur in sequence in the same family, frequently at the same address. Often several cases will occur in subsequent months or years at the same residence address, but with different names and different families. This permits of study as to whether the premises may be considered as infected, or whether the unsanitary surroundings of lack of fresh air and sunlight may be the causative factor, or whether the persons who are in reduced circumstances, lacking the necessities of life, may not have acquired the disease abroad and that these certain tenements may be the only refuge they may have.

It requires much patient investigation of many years' records and personal consideration of the cases to admit of satisfactory deductions, but a record of this kind will after several years be of service as a basis for such investigations.

Results of Examinations of Sputum for Tuberculosis from January 1, 1904, to January 1, 1905.

CLINICAL DIAGNOSIS.	Total.	T. B. present.	T. B. absent.	Past cases of T. B. in family.	At present, cases of T. B. in family.
Bronchitis.....	99	25	74	24	3
Bronchitis, chronic.....	55	15	40	10	1
Tuberculosis, Pulmonary.....	449	250	199	87	8
Tuberculous Laryngitis.....	31	11	20	8	.....
Tuberculous Pharyngitis.....	1	1	.....	1	.....
No diagnosis given, susp. T. B....	64	23	41	8	2
Pleurisy.....	14	3	11	4	.....
Asthma.....	2	.....	2	.....	.....
Hemorrhage of Lungs.....	4	1	3	.....	.....
Empyema.....	1	.....	1	.....	.....
Pneumonia (unresolved).....	27	4	23	5	.....
Grippe.....	2	1	1	.....	.....
"Nasal Catarrh".....	1	.....	1	.....	.....
Typhoid Fever.....	1	.....	1	.....	.....
"Nervous Cough".....	1	.....	1	.....	.....
Anemia.....	2	.....	2	.....	.....
Total.....	754	334	420	147	14

Besides these there was an examination made of pus from a tuberculous knee, with negative result.

During the year there were 754 specimens of sputum submitted for examination, with the supposition on the part of the attending physician that tuberculosis might be a factor in the causation of the symptoms of the patient.

Of these cases, in 449 the clinical symptoms present were sufficiently distinctive to lead the physicians to believe that tuberculosis of the *lungs* was present. In 250 of these cases the examination of the specimen of sputum showed the presence, in greater or lesser quantity, of tubercle bacilli. This would make 56 per cent. of cases where

the clinical diagnosis coincided with the bacterial findings, while in 199 cases, or 44 per cent., the bacilli of this disease were not found. While this negative result is of value, yet it does not carry the weight of a distinct negative, as to the actual presence of the disease, for it is possible to obtain from the patient a specimen of sputum which is composed of only the saliva and secretions from the larynx, and containing none from the air passages in the lungs. The organisms may also be present at times, in the lung, either lying dormant or encapsulated, and will not be discharged into the air passages, and become a part of the sputum, until a degenerative process is set up which breaks down the tissues surrounding the organisms and sets them free.

In the 31 cases of tubercular laryngitis, 11 were positive. The 1 case of tuberculous pharyngitis was positive. The application of this method of diagnosis is especially valuable in this form of the disease, inasmuch as the appearance of the larynx may indicate the presence of ulcerative processes, and the formation of tubercles from other causes.

In 14 cases the diagnosis was pleurisy, and of these 3 were positive. It is of especial value in these cases, for the organism may not as yet have invaded the lung, but if the cases are neglected, they may readily be carried to the lung or intestine, and there propagate the disease.

It is of interest to note that, of 154 cases of chronic and acute bronchitis, in 40 cases the diagnosis was erroneous, and the presence of tuberculosis was established in the bronchi, if not, also, in the lungs. The constitution of the patient, however, being sufficiently strong, as yet, to prevent the invasion of the organisms into large areas, the symptoms present were not sufficiently distinct, or alarming, to warn the physician of the dangerous element which was present. In 38 instances, where the diagnosis of bronchitis was made, there had been other cases of the disease in the family.

In the following table is presented the number of samples examined for each of the past five years, separating the same into positive and negative results.

YEAR.	Total.	T. B. +	T. B. —
1900.....	654	303	351
1901.....	720	327	393
1902.....	623	269	354
1903.....	739	337	402
1904.....	754	334	420

RECORDS OF DEATHS FROM TUBERCULOSIS.

In the table which follows it will be noted that there are other forms of tuberculosis than the common tuberculosis of the lungs (pulmonary tuberculosis), called "consumption."

Next to the pulmonary form the laryngeal form is the most dangerous. These two forms are sometimes designated as "open tuberculosis," inasmuch as the secretions may be dislodged from the degenerating tissues and brought to the open air, and are disseminated in such a manner that they may reproduce the disease. Other forms of tuberculosis occur, such as bone tuberculosis, tuberculosis of the abdominal organs or of the brain, or a general disseminating infection of the whole system. Deaths occur from all of these forms of the disease.

The following table gives the number of cases of death from lung tuberculosis and also of all other forms of the disease, as recorded by this department:

Deaths from Tuberculosis from 1890-1904

YEAR.	Pulmonary Tuberculosis.	Other Tuberculosis.	All forms of Tuberculosis.
1890.....	852	130	982
1891.....	740	151	891
1892.....	759	156	915
1893.....	722	146	868
1894.....	705	154	859
1895.....	799	137	936
1896.....	846	143	989
1897.....	777	152	929
1898.....	765	140	905
1899.....	823	168	991
1900.....	850	165	1,015
1901.....	844	150	994
1902.....	791	147	938
1903.....	840	188	1,028
1904.....	793	188	981
Total.....	11,906	2,315	14,221

EXAMINATION OF CULTURES IN CASES OF SUSPECTED DIPHTHERIA.

The examination of diphtheria cultures has been continued. This procedure has been utilized as an assistance in determining the presence or absence of the Klebs Loeffler bacillus, the bacterium causing diphtheria. This branch of the laboratory work was commenced in 1894, the Rhode Island State Board of Health being the first State Board to carry on this work, following by a month or two its adoption by the city of New York.

The material used for the test or examination consists of the secretions, mucus and cells, found in the back of the throat. This is removed by means of a sterilized cotton swab, which is supplied in the diphtheria culture outfits. The material secured on the swab is smeared on a nutrient sterilized jelly made of hardened blood serum and beef bouillon and found with the swab in the outfit.

The whole outfit is delivered by the physicians at certain stations, where an incubator is kept at 37° C. or 98.6° F. The resulting growth or culture on the surface of the media is well-grown or developed in from eight to twelve hours. These growths are examined at the bacteriological laboratory in the State house every morning in the year, and a report made *at once by telephone* to the physician who has presented the "culture" for examination.

This procedure enables the physician to verify his clinical diagnosis of the presence of diphtheria in the throat of his patient by showing the positive presence of the Klebs Loeffler bacillus, or, on the other hand, by the absence of that organism, confirms his diagnosis of pharyngitis or tonsilitis.

In many instances a positive finding in the presence of clinical symptoms which are negative of diphtheria has enabled the physicians to foresee and forestall by treatment the actual presence of diphtheria. The clinical symptoms may not have developed sufficiently to be diagnostic, and yet the presence of the characteristic bacillus enables the physician to be on his guard against any sudden depressing symptoms of the patient. It also places him on his guard against the spread of the disease to other members of the family. These persons may be more susceptible to the toxic influences of the organism than the patient, and may develop the disease in a more virulent form.

By thus being forewarned the physician is prepared to meet the serious symptoms of the disease and to neutralize the action of the organism, or rather its toxic products, by the administration of anti-diphtheritic toxin or diphtheria antitoxin. This product has been supplied by the State Health Department free, to those unable to pay for it, since its introduction to the profession. During 1904 388 packages of 2,000 units each were given out by this department.

The State was early in its belief that the protection of the individual case of a communicable disease against other members of the community was justifiable. In thus utilizing the State's money it was believed that the public was protecting itself against the spread of the disease by checking it in the individual.

If the individual having the disease was unable to protect himself against others, it was proper that the State protect its taxpayers, as it would in the isolation and sustenance of cases of small-pox.

As the State as a whole is protected in this way, the State assumes the expense of the protection.

While the expenses of examination of the cultures from the throats examined and the expense of antitoxin is seemingly considerable, yet, the value of the protection afforded is far above the expenditure.

During the year 1904 a total of 1894 cultures were examined for the presence of diphtheria. Of these 1,527 were primary cultures. Of this number the Klebs Loeffler bacillus of diphtheria was found in 484

cases, 369 of these showing a pure, unmixed culture of Klebs Loeffler, and 115 a mixture with micrococci or streptococci. The bacilli were absent in 997 cases. In the case of 46 cultures, the examination showed either contamination or no growth.

There were also examined 367 secondary cultures which were largely those taken in connection with the question of release from quarantine. Of these 150 showed the presence of the Klebs Loeffler bacillus and 211 were negative. In the secondary cultures, in 6 cases the examination showed either contamination or no growth.

The above figures are shown in tabular form in the following:—

Examinations of Throat Cultures for Diphtheria during the Year 1904.

	Cultures examined.	K. L. present.	K. L. pure.	K. L. with Mic.	K. L. absent.*
Primary.....	1,527	484	369	115	1,043
Secondary.....	367	150	.....	.....	217
Total for year.....	1,894	634	.....	.....	1,260

* Includes "Contamination" and "No Growth" cultures.

In the following table is presented the total number of cultures examined for the past 5 years, subdivided into positive and negative groups and these also into primary and secondary cultures.

YEAR.	Total Examined.	POSITIVE.			NEGATIVE.			"CONTAMINATION" AND "NO GROWTH."	
		Total.	Primary.	Secondary.	*Total.	*Primary.	*Secondary.	Primary.	Secondary.
1900.....	1,382	430	300	130	952	749	203	19	5
1901.....	1,638	564	314	250	1,074	835	239	56	26
1902.....	1,433	405	308	97	1,028	869	159	39	6
1903.....	1,316	374	297	77	942	808	134	68	20
1904.....	1,894	634	484	150	1,260	1,043	217	46	6

* Includes "Contamination" and "No Growth" cultures.

EXAMINATIONS OF THE WIDAL REACTION IN CASES OF SUSPECTED TYPHOID FEVER.

The discovery by Widal that persons who had been affected with typhoid fever for a certain period of time developed within the system a certain toxic product which had the power of checking the life of the true typhoid bacillus grown outside of the body, was utilized by the Board, as was the case in other States and certain cities.

This reaction is obtained by securing from the ear or the tip of the finger of the patient a single drop of blood. The serum of this blood, when mixed in certain proportions of strength with a large quantity of the living typhoid bacilli, causes the live organisms to grow sluggish in their motile action and finally to unite with others in the same mixture, producing a massing or clumping of the organisms.

This reaction may take place in from twenty to ninety minutes, according to the strength of the toxic or antitoxic material in the blood serum tested.

The organisms which are subjected to the test must be at least twenty-four hours old, and not older. This necessitates the planting and growing of a fresh culture every twenty-four hours. To accomplish this, nutrient media of blood serum or agar agar must be kept on hand and in stock to continue the growth of the culture for stock purposes. From this stock growth, the amount of organisms which may be gathered upon the tip of a needle is introduced into a nutrient media of beef broth or bouillon and here grown for the twenty-four hours.

As these facilities and all the paraphernalia necessary to make this test are not available to the average physician, it is necessary for some central laboratory to undertake this work.

As typhoid fever is a communicable disease, it is the duty of all States and municipal boards of health to aid the physician in such cases as far as possible, by determining for the physician the presence of the disease, the public as a whole receiving the benefit of an early confirmation of diagnosis and the better care of the patient and proper disposal of his excreta.

To facilitate the offer of the Board to make this test for physicians, typhoid "outfits" are placed at all the depositories where diphtheria culture tubes and sputum outfits may be obtained.

This outfit consists of a card upon which the history of the case may be entered, the name of the physician, etc. Also a small piece of thin sheet aluminum to receive the drop of blood taken from the patient, a three-cornered glover's needle for puncturing the skin, and a small wire loop for transference of the drop of blood from the skin to the aluminum plate.

A report of the result can usually be given to the physician, by telephone, on the morning following the day upon which the sample is received.

As a result of this offer of assistance, physicians availed themselves in many positive cases, and in many cases in which they were somewhat in doubt, as is shown by the following table:

Positive.....	48
Negative.....	122
Unsatisfactory.....	7
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Total.....	177

In the following table is shown the number of examinations made for the Widal reaction during the past 5 years, together with the results.

Year.	Total.	Positive.	Negative.	Unsatisfactory.
1900.....	142	43	91	8
1901.....	175	70	102	3
1902.....	168	47	111	10
1903.....	185	72	105	8
1904.....	177	48	122	7

THE WORKING OF THE MEDICAL PRACTICE ACT.

EXAMINATION OF APPLICANTS.

Under the act controlling the practice of medicine in this State, which was passed in 1895, provision was made that certificates or licenses to practice medicine should be issued to all persons who had been in practice for three years previous to the passage of the act. This necessarily included a certain number of ignorant practitioners and charlatans who had had no medical education, and also included a large proportion of physicians who were graduates of medical schools. All those who did not come under this provision were required to present a diploma from a medical school in good standing, recognized by the Board as such. If the school had no standing whatever, or the applicant was a non-graduate, such applicant was required to take a full examination in the several branches of medicine. If the school from which he graduated had a fair standing only a supplementary examination was required in the three principal branches.

The examinations were presented in writing. The full examinations included questions in the branches of Anatomy and Physiology, five questions each; Chemistry and Materia Medica, five questions each; Theory and Practice, ten questions; Surgery, ten; Obstetrics and Gynæcology, five each; Pathology, ten; and Hygiene and Medical Jurisprudence, five each. A general average of 75 per cent. of correct answers was required. The supplementary examinations included only Theory and Practice, Surgery, Obstetrics and Gynæcology. It was assumed that if the applicant showed a good average knowledge of the three most important branches, a school which did not have a full four years course, would however have given a satisfactory preparation to the applicant.

In 1901, the law was changed, providing that an examination be required from all applicants, whether from schools having good qualifications or not, or if the applicant was a non-graduate. This examination has been given in all the subjects named above.

During the present year there were 59 applications, action upon which was as follows:

EXAMINATIONS, 1904.

Passed first examination. (Graduates).....	47
Passed second examination. (Graduates).....	2
Passed fifth examination. (Graduate).....	1
Passed first examination, Senior year in college.....	2
	<hr/>
	52
Failed on first examination. (Graduates).....	5
Failed on second examination. (Graduate).....	1
Failed on first examination, Senior year in college.....	1
	<hr/>
	7
Total.....	59

Percentage of applicants passing (52 out of 59) — 88.1 per cent.

Percentage of applicants passing first examination (49 out of 55)
— 89.1 per cent.

The following table gives the percentages acquired by the applicants coming from different schools:

RESULTS OF EXAMINATIONS DURING 1904.

COLLEGE.	Number passed.	Percentage.	Number failed.	Percentage.
Baltimore Medical College.....	2	79.3	.....	.....
		83.8	.....	.....
Baltimore University, School of Medicine.....	.....	.....	1	60.4
Boston University, School of Medicine.....	4	80.1	.....	.....
		83.7	.....	.....
		82.0	.....	.....
		77.9	.....	.....
Bowdoin, Medical College.....	1	76.4	.....	.....
College of Physicians and Surgeons, Baltimore	6	78.7	.....	.....
		75.0	.....	.....
		87.4	2	70.0
		85.0		57.6
		84.3	.....	.....
		86.5	.....	.....
College of Physicians and Surgeons, Boston.....	2	75.0	.....	.....
		79.1	.....	.....
		75.7	.....	.....
		85.4	.....	.....
College of Physicians and Surgeons, New York.....	5	79.5	.....	.....
		90.4	.....	.....
		88.9	.....	.....
Dartmouth Medical College.....	1	89.1	.....	.....
Georgetown University, Medical Department.....	1	88.2	1	62.0
		86.1	.....	.....
		93.6	.....	.....
		91.0	.....	.....
		79.8	.....	.....
Harvard University, Medical School.....	9	90.0	.....	.....
		85.3	.....	.....
		85.9	.....	.....
		83.2	.....	.....
		78.6	.....	.....

RESULTS OF EXAMINATIONS DURING 1904.—Concluded.

COLLEGE.	Number passed.	Percentage.	Number failed.	Percentage.
Jefferson Medical College.....	4	78.6 83.0 86.4 82.7	1	*
Kentucky School of Medicine.....	1	77.6		.....
Manitoba Medical School.....	1	79.4		.....
Maryland Medical College.....	2	74.7 75.3	1	65.9
Medico Chirurgical College, of Philadelphia.....	1	76.5		.....
Syracuse University, College of Medicine.....	1	82.1		.....
Tufts College, Medical School.....	3	76.6 77.4 77.0		.....
University Medical College.....	1	87.2		.....
University of Maryland, School of Medicine.....	2	89.1 84.0		.....
University of Pennsylvania, Department of Medicine.....	1	83.8		.....
University of Vermont, Medical Department.....	2	76.1 85.4	1	74.0
Yale University, Medical School.....	2	85.2 84.1		.....
Totals and averages.....	52	82.4	7	65.0

* Left examination before completing subjects, no rating given.

REVOCATION OF LICENSE.

Information having been received by the department that Dr. Jose P. F. P. M. Lobo, to whom had been granted a certificate to practice medicine in this state upon having passed a satisfactory examination in October 1903, was conducting his practice using misrepresentations of a character likely to deceive and defraud the public, he was requested to appear before the Board to explain or discredit such information.

A hearing was granted him on March 10, 1904.

Evidence was presented to the Board in the form of what appeared to be an advertisement in different forms, setting forth the abilities of Dr. Lobo; his success in the treatment of numerous diseases; the successful cure of consumption, etc., all of an extravagant character in statement. All of these notices or advertisements were associated with a reference to a certain druggist named Souza, who was located upon the same street as Dr. Lobo. This druggist had at different times been named by the police for illegal sale of intoxicants.

All of these notices appeared in a paper or papers issued in Portuguese language in the city of New Bedford.

There also appeared notices which stated that Dr. Lobo had been invited by the superintendent of the Rhode Island Hospital to become a member of the staff of this hospital, and to participate in all the operations.

It also appeared that Dr. Lobo had been appointed a member of the State Board of Health.

In answer to this evidence Dr. Lobo asserted that he was not responsible for the appearance of these advertisements; that they had been placed there by his friends without his consent. He was, however, aware of the publication and circulation, but he did not deem it his duty to notify the editors of those papers of the incorrectness of these statements. If some one placed them there he could not help it.

The secretary was instructed to ascertain from the editors of these papers whether any protest had been made by Dr. Lobo against these publications.

At a meeting of the Board held on April 19, 1904, the evidence against Dr. Lobo was again considered. It was shown by evidence in the form of communications between the secretary of the Board and the editor of the paper in which the false statements appeared in regard to his practice, that Dr. Lobo had not demanded or required the discontinuance of these notices, although he was aware of their appearance before the public. The Board therefore considered that such false statements were of a character likely to deceive and defraud the public, and upon vote his certificate was declared revoked.

SANATORIA FOR CONSUMPTIVES.

STATE SANATORIUM.

The State Sanatorium is located at Wallum Lake in the north-western part of the State in the town of Burrillville, at an elevation of about 600 feet. It was erected by a commission which was appointed at the January session of the General Assembly in 1902.

It secured a site of 250 acres, much of which consists of wooded land bordering on Wallum Pond. The buildings had been erected and the interior was being finished at the end of the year 1903.

The buildings consist of an administration building 74 feet long, 47 feet wide and 33 feet high, admitting of a three story structure. From the rear of this building short covered corridors connect with two wings on either side. These are 179 feet long, 26 feet wide and 27 feet high, being two-story structures. A solarium is placed at the south end of each wing. The service building 105 feet long, 30 feet wide and 33 feet high accommodates the kitchen, laundry, servants' quarters and boilers and dynamos.

Connecting the administration and the service building is the dining room (41 x 33 feet) and one story high. A stable at one side completes the buildings.

The water supply is taken from Wallum Pond, or lake, a body of water which has a comparatively unoccupied water-shed. The water is clear, the bottom being readily seen at a depth of fifteen feet. Chemical and bacteriological analyses of this water were made for the commission by the State Board of Health, samples being taken on October 23, 1903, and it was found to be of the finest quality. The water is to be supplied by an automatic steam pump, located near the pond, steam to be supplied by a pipe laid from the boiler-room of the sanatorium several hundred yards away. The pressure is to

be maintained in a pressure tank located in the pump house. On November 18th, 1903, a formal inspection of the buildings was made by the Governor and legislators, on invitation of the commission.

At the January Session, 1903, \$75,000 was appropriated to secure the land and erect buildings.

At the January Session, 1904, the commission asked for \$75,000 additional to complete the building and to cancel unpaid bills due to the contractors. \$21,000 only was granted, thus at the end of the year 1904, the Sanatorium was nearly completed. There yet remained to be supplied, furnishings, grading and a sewage disposal plant.

PINE RIDGE CAMP.

The Pine Ridge Camp, which was opened in June 1903, in the town of Foster on the Danielsonville Trolley Railway Line and dismantled in November on account of the impracticability of maintaining the camp in tents through the winter weather, was reopened in the spring of 1904.

Small huts were erected to accommodate patients in all seasons. These small houses were of simple design and so constructed as to obtain sufficient space for lodging and with construction at a minimum cost. The cost of erection was estimated at \$150 apiece. They were 10 x 12 feet in dimensions and were made of double thickness of pine boards with a lining of heavy paper. This would accommodate two persons, the cots occupying the length of the two sides of the houses. A small stove was installed for use during the time of rising and retiring. Over each cot a window running the length of the side of the hut was tilted inward from the top. This permitted a free current of air from one side of the shack to the other, without blowing directly upon the cots. A broad shelter tilting upwards on the outside, protected the window frames from beating storms. These windows were kept open day and night.

A full sized window and door were inserted in the front and a corresponding window in the rear. A narrow platform surrounded the

shack outside, permitting the patients to sit comfortably out of doors in the day time.

The shacks were to be commended from their simplicity and economy of construction.

An idea utilized in other camps in the United States was the use of street cars discarded by the railway company. These were easily transported to the camp, and provided a shelter with sufficient light and air, abundance of ventilation for at least one patient, which was in contrast with the effort of the railway company to ventilate the same car containing forty passengers.

It was estimated that the cost of operation would be five dollars for a week per patient.

It was proposed that soon as the State Sanatorium was ready to secure patients that the camp might be relieved of at least the incipient cases.

While subscriptions were received from time to time to meet the incurring expenses, they did not prove sufficient to meet the continued operation of the camp and a request was made of the state legislature at the January session of 1904, for an appropriation of \$2,000 to assist in continuing the work of the camp.

The report of the Secretary, Dr. W. H. Peters, who was the primitive mover in the establishment of the camp showed that up to March 1, 1904 there was received from subscriptions, dues, board, etc., \$5,508.17. Expended for disinfectants, supplies, food, etc., \$1,908.57. Equipment, buildings, etc., \$2,687.29. Salaries, \$477.83. Freight, \$94.57. Incidentals, \$35.60. Total, \$5,203.80. Balance, \$304.37.

HILLSGROVE SANATORIUM.

St. Joseph's Hospital conducted under the Roman Catholic management is located in the city of Providence.

It was intended previously for the treatment and care of all forms of disease except those of a contagious or infectuous nature, and while not having accommodation for the communicable diseases, often found within its wards cases of pulmonary tuberculosis, sometimes in

the advanced stage, and at times admitted to the hospital on account of some other affection.

It was not the desire nor the intent of the management to receive nor to retain such cases on account of the possibility of infection of other patients weakened from the effects of other diseases. For the same reason the only other general hospital in the State firmly refused refuge for cases of open tuberculosis.

The spirit of the management could not turn these cases back upon their homes if they had such a refuge, and could not throw them upon their own resources, so the best tentative arrangement possible was made by separating this class of cases in a separate ward, which of course could not accommodate all the applicants for relief.

At this time provision was being made by the State for a State Sanatorium, but it was intended that this institution should receive only the incipient or beginning cases. At its full accommodation it could receive only one hundred and ten of the three thousand cases of the disease which it was assumed existed in the entire State.

The St. Joseph's Hospital management therefore felt the need of relieving its general hospital of the possible dangers of infection and was impressed with a desire to do its share of public benefaction.

The Hospital therefore has secured a tract of land at Hillsgrove near Apponaug in the town of Warwick, upon which it will erect a hospital to be directed entirely to the treatment of cases of consumption. The buildings are to include a long main building with the necessary administration offices, and dining room with wings at each end for the patients. The main building to be two stories in height, the main hall being 30 feet in length, accommodation is intended for fifty patients. The work of excavating was well under way in November, and while preference might be for incipient cases, yet probably no worthy cases will be refused admission to the extent of the available empty beds.

This enterprise may seem as a demonstration of the need of some public institution which may care for the majority of the helpless advanced cases of consumption.

INSPECTION OF STEAMBOATS.

On June 15, 1904, the country was startled by the report of the burning of an excursion steamer named "General Slocum" in New York waters. The fire originated and spread with such activity that the boat was soon a mass of flames; the captain ran the boat to the nearest shore and grounded. The passengers, composed largely of women and children, panic stricken and forced by the rapid spread of the flames, leaped into the water or were entrapped between the decks of the steamer. The loss of life was considerable, numbering 1,021. It was reported that no adequate provision had been made for fire drill of the crew, that the fire-hose which was brought into use kinked and burst, and that the life preservers found upon the recovered remains had no floatage, but sunk when immersed in water. It was further stated that the steamer had received the routine inspection required by the United States Government previous to the disaster.

Inasmuch as there are many excursion steamers plying between different shore resorts located on Narragansett Bay in this State, which received the regular government inspection at the port of Providence, and as these steamers were often crowded to the limit of their licensed capacity, it was deemed desirable by the Governor that a supplementary inspection be made by some state department to reassure the passengers on these boats that all possible provision had been made for their safety against damage to body or loss of life through sudden outbreak of fire during passage on the river or bay. Thereupon his Excellency, Governor Lucius F. C. Garvin, on June 20, 1904, requested that an inspection of the several boats be made by the State Board of Health.

The Secretary was directed by the Board to secure the assistance of an experienced person, and that together they inspect and report.

The services of Mr. Gardiner C. Sims was secured, and this was approved by the Board. Inspection was made and the results incorporated in the following report, which showed that all steamers hailing from the port of Providence and engaged in excursion traffic were, except in a few minor details, satisfactorily equipped with apparatus and appurtenances to care for any accident from fire so far as might be possible, barring stampede and inability of control of masses of human beings under extreme excitement.

The report made to the Governor follows:—

July 14, 1904.

TO HIS EXCELLENCY LUCIUS F. C. GARVIN,
Governor of Rhode Island.

DEAR SIR:—On June 20, 1904, the Board was in receipt of the following communication from you:

“Inasmuch as the season for excursions and increased passenger traffic upon steamboats is at hand, and uncertainty exists in the public mind, and, it may be, in fact, as to the degree of protection against dangerous burns afforded by the passenger steamboats upon Narragansett Bay, therefore:

Under the authority conferred upon the Governor by Section 2 of Chapter 96 of the General Laws, I hereby refer to you for investigation and advice, the conditions and circumstances by which women and children will be affected when they become passengers upon said steamboats.

You will please report your findings at the earliest possible day, giving the name and description of every steamboat so used, and in detail the condition and circumstances in so far as they are liable to affect the life and health of the women and children who may be passengers thereon.”

At a special meeting of the Board held June 23, 1904 this communication was presented and the following action taken:

RESOLVED: That the Secretary be instructed to take the necessary steps to comply with the request presented by the Governor.

The assistance of Mr. Gardiner C. Sims was secured as inspector and the several excursion steamboats which are running in Narragansett Bay were examined.

That the inspections might be made intelligently and with full understanding of the requirements of the government inspections, a telegram was forwarded to Mr. George Uhler, Supervising Inspector General of the Treasury Department asking that local inspectors might be advised to assist your inspectors as far as consistent with the rules and regulations of his department. This telegram

received an immediate answer and the local inspectors were ordered to give such facilities and information as might be useful in carrying on the work.

Interpreting your request to apply only to such boats as were apt to be crowded by large numbers of excursionists, our inspector did not include the regular passenger steamers plying between Providence, Newport, and New York; nor the ferry boats running at Bristol Ferry, Jamestown, Saunderstown, Newport and Wickford, nor boats coming from other places in Rhode Island.

The boats inspected were the *City of Newport*, *Warwick*, *Baltimore*, *What Cheer*, *Favorite*, *Mount Hope* and *Squantum* owned by the Providence, Fall River and Newport Steamboat Company, the *Queen City* and *Islander* owned by the Seaconnet Steamboat Company, the *New Shoreham* owned by the Block Island Steamboat Company, the *Corsair* owned by George B. Hull, all registered from Providence, and the *Pontiac* from Pawtucket owned by J. A. Moncreif of New York City, also the *Haverhill* owned by the Providence, Newport and Block Island Steamboat Company.

The method of inspection consisted of an examination of the license certificate issued by the United States Government Inspector, to ascertain the equipment required by the government.

The details of the equipment was of interest to us only so far as the apparatus called for had relation to the control of fire and provision for the safety of passengers obliged to leave the boat on account of fire.

This included the number of steam pumps, the number of feet of hose, the composition of and condition of the hose, the manner in which it was connected to the service pipe and the manner in which it was stored, the number of axes, the number of water buckets filled $\frac{3}{4}$ with water and the number of water barrels.

Under the floatage equipment note was made of the number of life preservers, the composition and covering of the preservers, the age and strength of the straps which hold the preserver to the body and the manner and location in which they were stored; if easily accessible and if they were to be found in all the locations bearing the legend "Life Preservers," also the manner in which they were hung upon overhead supports and if the retaining slats could be removed without difficulty; the number of life boats, whether of metal or wood or both; the number of life rafts and their carrying capacity as to the number of persons.

It was also noted if the government requirements were supplied by four oars to each boat, life lines and painter to each boat and two oars to each life raft. It was noted whether the boats were located in a position to be easily launched and if the davits and tackle were in workable condition. On every boat fire drill was executed and boat drill was carried out.

An examination of the galley was made to ascertain if the stoves and ranges were fastened to the deck and to observe if there was protection of the floor

and wood work about the stove, against over-heating and from sudden rush of flame from the stove.

The lamp or oil rooms or closets were each examined to ascertain if they were properly lined with metal.

The character of the electric light wiring and the material of which the switch boards was made was ascertained.

Each of these things was examined in detail and the number called for was verified except for two items. It was manifestly impracticable to count the number of life preservers present and the number of water pails was not always verified, but your inspectors felt assured, from a general survey of the preservers exposed, that the number required was present.

The number of preservers is certified to by the local inspectors annually after an actual count. Judging from the conditions found in other forms of equipment as passed by these inspectors, we have every confidence that the count is correct for the number required under the regular license.

The number of preservers called for in an additional special license granted for carrying additional excursionist passengers is vouched for under oath by the captain of the steamer which carries the extra number. This declaration is accepted by the local inspectors and is believed by them to be correct, inasmuch as the possibility of a count at any time with a deficiency might cause the captain so negligently making a declaration to lose his commission and license.

The steam pumps were found to be in good working order and as these pumps are used many times a day for supplying water to the boilers there should be no question as to failure to act in time of emergency. The hand pumps were in good working order except in four instances. In three of these the bolts holding the pump to the deck had become loosened and the working of the pump was thus hindered. In one case the pump would not work at all, the valves being of leather had dried and no suction could be obtained. This boat did not receive the inspector's certificate at this port.

The fire hose, except in three cases, was new and firm. It was mostly composed of very heavy rubber, only a few steamers having any canvass covered hose. In most instances the hose was stretched out its full length supported on hooks overhead. In only a few instances was the hose rolled up. In two of these conditions the hose kinked upon unrolling, owing to the limpness of the hose, it having become old and weak but capable of carrying water. In only one case did the hose burst. This boat was not inspected at this port. All fire hose was connected with the service pipes ready for use. When the hose was stored in folds or layers there appeared to be no delay in running off the hose and no kinks occurred. The fire drill was responded to promptly in every instance, although the crews in one or two cases had not been enrolled over forty-eight hours.

Streams were flowing from every line of hose inside of a minute from giving the alarm.

On all the boats owned by the Providence, Fall River and Newport Steamboat Company, extra precaution against fire is provided for by the installation at convenient points of portable fire extinguishers of large size and of practical design, although there is no provision in the government regulations calling for this equipment.

In the matter of life preservers, it was found that the government requires the a life preserver "shall be made of good sound cork blocks or other suitable material" and maintain or float a weight of 24 pounds of iron in sea water. A test of a compressed cork preserver was made and found to meet the buoyancy required.

Yet the composition of the floatage or material of which the preserver is made may be solid cork, granular cork compressed or united into a solid mass with an adhesive mixture, granular cork or cork sawdust such as is used for packing Malaga grapes, or they may be made of tule. Tule is a light, dry, fibrous water reed. It is cut up into suitable lengths and a dozen of them are bound at each end with a wire. A sufficient number of these bundles are sewed up in the canvas jackets.

From the experience of the Providence, Newport and Fall River Steamboat Company it has been found that the granular cork preserver was undesirable. Although its floatage is sufficient and the canvas covers are changed before they are weakened with age, yet the danger is from the canvas being torn by passengers, either from a spirit of mischief or for investigation, permitting a portion of the granular cork to run out, thus lessening the value of the floatage. It was also found that rats have a special fondness for eating into the granular cork, either in the fine form or when compressed. The compressed cork, however, cannot leak out as it is in a solid block. The rats do not appear to attack the solid cork. The Providence, Fall River and Newport Steamboat Company are abandoning all granular cork and substituting the compressed or solid cork as rapidly as possible. This was being done before your inspectors made the visit. They were also substituting rubber hose for canvas covered.

The coverings of the life preservers were found to be of stout canvas and the straps firmly sewn on. As each preserver is inspected every year by the local inspectors, it is not probable that many of these preservers would be unfit for use. The greatest exposure is on the forward and aft open decks, where the salt water and fog may cause mildew of the cloth, but in no case was any preserver found in which the canvas had decayed, although some of them were stamped with the inspector's date of many years ago.

In all cases preservers were easily accessible, those hung overhead being held in place by thin strips of wood attached with a brad nail and easily torn away.

The life boats all appeared to be in good order, and readily unshipped and supplied with all the requirements of the government. Each boat was supplied with a screw metal cap or plug for closing the opening in the bottom of the boat. The boat drill was, in some few cases, executed in a clumsy manner, but was effectual. In most cases however, the drill was prompt and rapidly executed. In one instance six boats were swung out from the davits ready to let fall inside of five minutes, by the same crew. From one half to three quarters of a minute was the time usually required from the time the crew arrived at the falls or davits.

In some of the steamers the galley or cook room is provided with a brick floor and tinned sides and back of the stove and overhead. Several, however, did not have metal sheathing or protection in front of the stove on the floor, nor were the sides covered with tin.

The stoves were found fastened firmly to the deck, except in one instance, where a small stove used for "light housekeeping" was supported on blocks and bound to the deck by a twisted wire.

Lamp or oil rooms were all lined with tin or sheet iron, except in two cases, where there was no tin on the door, and in one where the room connected with a stateroom by closed windows.

Electric light switchboards were, except in two cases, made of slate and ample air space allowed behind the same. In only one case were untaped loose ends of wire found. The rest of the wiring, although concealed, had the appearance of having been installed in a conscientious manner and under some exact form of requirements.

While it is hardly to be expected, that a trained crew of experienced sailor men can be obtained for a period of only three months, yet in most of the steamers inspected the crews appeared to be made up of men of foreign birth, the majority of whom appeared to be amenable to discipline and who quickly learned their duties.

Every facility was accorded your inspectors in their work by the owners and officers of the several companies, and every offer was made to correct any defect which the inspectors might be able to discover.

Your inspectors feel that the conditions found satisfactorily meet with the requirements of the government regulations. These regulations have been compiled as the result of many years of practical experience and are probably all that can be made available. It is realized that whatever provision is made, no matter how adequate, it is impossible to always prevent panic in the presence of a mass of people and that any official restraint may be resisted. In this connection it seems desirable to call attention to the method of launching the boats. As the boat is lowered, it is the duty of one or more of the crew to jump into the boat to fend it from the sides of the steamer and to man it when in the water. As his act is done with considerable rapidity and commotion, it might appear to

the passenger that the crew were desirous of taking the boat to themselves. This thought might create a rush of passengers for the boat which would overload and swamp it. It would seem desirable that, the public inform themselves as to the manner of this procedure.

The perfect condition in which everything was found leads your inspectors to believe that beside the desire on the part of the owners to perfect their accommodations, much is due to the efficient and conscientious control and co-operation of the local inspectors with the companies. Whatever may be the opinion of the character of the inspection as carried on at other ports, we feel satisfied that whatever an annual inspection calls for in the government regulations, those conditions will be required and installed by the two inspectors who are appointed to supervise this district.

As to your request for advice under the conditions found, we feel that we may properly make the following recommendations:

1. That all life preservers in which the floatage is dependent upon sawdust cork or granular cork be substituted by either compressed granular cork or solid cork.

2. That all enclosed spaces occupied by stoves used for cooking should be lined with galvanized iron, with air spaces between wood and metal.

3. That whenever practicable, all hose should be stretched out to its full length and if flexible, as with canvas hose, it should be stored in layers or folds instead of being rolled or reeled.

4. That officers, stewards and stewardesses have periodical practice in the manner of applying life preservers.

5. That the placing of fire extinguishers at convenient points is considered of great value. They can be put into action promptly without the commotion or delay of a call for fire drill. They can be quickly carried to and into small spaces between decks, where time would be required to carry a line of hose.

6. That as the government does not require excursion and inland steamers to rate mates similar to the legal requirements of ocean going steamers, we would respectfully recommend that all passenger steamers of Rhode Island register be requested to rate a first mate who shall have passed the regular examination of the local inspectors. Inasmuch as the examination requires a comprehensive knowledge of the English language and an intelligence above the average seaman, it is obvious that such a mate would be necessary in the presence of accident or panic and will enforce government laws which are manifestly inefficient.

Respectfully submitted,

GARDINER C. SIMS,
GARDNER T. SWARTS.

CONTROL OF WATER SUPPLIES.

POLLUTION OF THE TEN MILE RIVER.

(East Providence Water Supply).

As a result of the periodical examinations made in the course of the regular oversight of the public water supplies of the state, it was noted that the water of the Ten Mile River was unusually polluted during the early part of this year (1904) and the latter part of the previous year (1903).

The water from this stream is used after filtration by the East Providence Water Company as a town supply. The water before being supplied to the consumers is treated by mechanical filtration and so purified as to make a safe potable water. At this time it was also noted that the output of the filters was not of the usual standard of purity.

On February 2, 1904, the attention of the East Providence Water Company was called to these conditions and a request made of them by the Board, that a thorough inspection of the water-shed be made to determine the source of the increased amount of pollution, also that the operation of the filter plant might be investigated for the purpose of determining if the high standard of purity might not be maintained even with the increase in the amount of contamination of the raw or unfiltered water.

On February 4th and 9th, 1904, the following reports were received from the East Providence Water Company, giving in detail the manufacturing, etc., delivering waste materials and sewage matters into the Ten Mile River or its tributaries. The second report reproduces some

of the places named in the first, but both reports are given as received by this department.

REPORT ON POLLUTION OF TEN MILE RIVER.

(February 4, 1904.)

Attleboro.

S. O. Bigney; 500 hands; sewerage runs direct to the river.

Watson & Newell, Mechanics St.; 350 hands; sewers into vaults, with some leakage into river.

Horton & Angell, Bank St.; 96 hands; sewers into the river.

R. F. Simmons & Co.; 300 hands; sewers into vaults, with some leakage into the Bungay river.

Estate of E. A. Robinson, 3 buildings, 350 hands; Bailey and Union Sts.; through the public sewer into the river.

W. H. Wilmarth & Co.; sewers into vaults.

Attleboro Mfg. Co., Hazel St.; 500 hands; sewers into vaults.

D. E. Makepeace, Pine St.; 500 hands; sewers by public sewer into river.

Bates & Barr, County St.; 175 hands; claim sewerage goes into vaults.

A. Bushee, County St.; 75 hands; sewers into river direct.

Bates Bldg.; 600 hands; through public sewer into the river.

Steam Power Bldg., Railroad St.; 100 hands; sewers into the public sewer.

Frank Mossburg Co.; 100 hands; sewers into vaults.

J. E. Bates, So. Main St.; sewer into vaults.

Hebron Mfg. Co.; at Hebronville, 250 hands; at Dodgeville, 250 hands.

Pawtucket Dyeing & Bleaching Mfg. Co.; 75 hands; sewerage into vault 10 feet from the river. Sink waste into the river direct. E. W. Orswell, Mgr.

There are two public sewers in Attleboro, one on County street and one on Maple street, which sewers were originally built with the idea of carrying away rain and surface water entirely, but have since been utilized for private sewers and for manufacturing sewers.

The only one of the above parties in Rhode Island is the Pawtucket Dyeing & Bleaching Mfg. Co.

This is a fairly complete canvas of the town of Attleboro. We have not yet canvassed North Attleboro, but will as soon as possible, and report.

SUPPLEMENTARY REPORT ON POLLUTION OF TEN MILE RIVER.

(February 9, 1904.)

We respectfully submit the following supplementary report on the pollution of the Ten Mile river.

Plainville Land Co., Plainville, town of Wrentham; two large buildings; 400 help; sewerage all goes into the river.

Royal Textile Co.; Plainville; small building being fitted up directly over the river. At present, no help employed.

F. M. White & Co., Broad St., North Attleboro; jewelry manufacturers; employ 400 help; sewerage waste into the river.

Estate of R. E. Richards, North Attleboro; jewelry; employs 160; waste into cess-pool, and then into the river.

T. Talton & Co., East St., North Attleboro; jewelers; employ 100 help; waste into vault, with a siphon into the river.

T. I. Smith, North Attleboro; employs 775 help; waste into vault, with an overflow into the river.

F. G. Pate, Chester St., North Attleboro; employs 700 help; waste into vault, some waste into the river.

A. H. Bliss, North Attleboro; 200 help; waste through a cess-pool into the river. Cess-pool of no value to retain waste.

Codding & Heilborn Co., North Attleboro; employs 50; waste into the river.

Standard Braid Co., Attleboro Falls, North Attleboro; employs 40 help; waste into the river.

Mrs. B. H. Blackington, Robinsonville, North Attleboro; jewelry manufacturer; employs 21; waste into the river.

J. F. Sturdy & Son, Fallon Estate; Robinsonville, North Attleboro; employs 375 help; waste into the river.

A. Bushee, County St., Attleboro; jeweler; employs 75 help; waste into the river.

Watson & Newell, Mechanics St., Attleboro; jewelers; employ 350 help; waste in vaults and a small amount of leakage into river.

S. O. Bigney & Co., County St., Attleboro; employ 500; waste into river.

Horton & Angell, Bank St., Attleboro; jewelers; employ 90; waste into the river.

R. F. Simmons, Bank St.; employs 300; waste into the river.

R. Wolfenden & Son, Dye Works; Attleboro; employ 40; waste into river.

D. E. Makepeace, Pine St., Attleboro; employs 500; waste empties into public sewer.

Estate of E. A. Robinson, 3 buildings on Bailey and Union Sts.; employs 350; waste goes into public sewer.

Bates Bldg., Railroad St.; employs 600; waste into public sewer.

Steam Power Bldg., Attleboro; employs 100; waste into public sewer.

Two public sewers enter the Ten Mile River, one on County street and one on Maple Street, which take care of a large portion of sewerage of Attleboro.

Hebron Mfg. Co., Dodgeville, Mass.; 250 help; waste into the river.

Hebron Mfg. Co., Hebronville, Mass.; employs 260; waste discharged into river, waste from tenements in vaults.

Pawtucket Dyeing & Bleaching Mfg. Co., Pawtucket, R. I., E. W. Orswell, Mgr.; employs 75 hands; waste from help, discharged in vault on bank of river; waste from works into river direct.

SEVEN MILE RIVER.

Empties into the Ten Mile River.

William Coupe & Co.; tannery; employ 40; waste into river; water is highly colored.

N. Rowe & Son Rendering Co., is also located on stream leading into the Ten Mile River. There dead animals are steamed and sold for food for fowls and fertilizer. They claim there is no pollution from these works going into the river.

In the above cases we have given names of the owners of the buildings. Each building is occupied by several tenants, and we find no further pollution.

By examination of these reports it will be noted that there were 32 manufactories or establishments which discharged refuse of various kinds into the streams either directly or indirectly. The character of the refuse included acid liquors from jewelry establishments, and dye stuffs. It also included the excreta from about 7,000 people employees at these places. Two trunk sewers in the town of Attleboro, accommodating a portion of the town, delivered the town sewage into the stream at two points.

One of the dye houses was located within the limits of this State, the balance were located in the State of Massachusetts. The Rhode Island State Board of Health had no power to abate the pollution existing even in its own State. An appeal was made by this board to the Massachusetts State Board of Health for assistance by abatement

of the pollution of that portion of the stream located in the neighboring State. The Massachusetts Board replied that although certain laws of the Commonwealth gave it control of any new pollution liable to be produced, yet it had no jurisdiction over nuisances of this kind which already existed at the time that the controlling statute was passed. It could therefore give no relief or assistance.

An appeal to the town of Attleboro for assistance met with the reply that while the town was desirous of being of service, yet owing to economic and engineering reasons it was impracticable to prevent the existing pollution.

The only redress available was the possibility of a civil suit by the water company against each individual, town and corporation which was using a water privilege to the detriment of the character and quality of the water before reaching the intake of the water company at Hunt's Mills.

With the possibilities of indefinite delays in the courts to accomplish any results by this means it was deemed advisable to depend upon perfecting the operation of the filter plant in order to produce a water which would be safe for drinking purposes. Immediate attention was given to this important requirement and the output of the filter plant was brought to its usual standard of purity.

It developed that the conditions which had been noted could probably be partly accounted for by by extensive repairs at one of the reservoirs on the stream, necessitating the removal of an old dam, and exposing large quantities of sedimented material.

POLLUTION OF THE ABBOTT RUN.

(Water Supply of Pawtucket).

Any stream in a district as closely populated as is a large part of the State of Rhode Island is open to the possibility of pollution either temporarily, or, as in the case of the establishment of an industry or habitation, may be permanently subject to contamination.

The stream called the "Abbott Run" which supplies the City of Pawtucket with water is not exempt from these possibilities.

Its tributaries starting in a farming district pass down into the main stream which winds through agricultural land, which is being continually fertilized with animal as well as human excreta. It also passes by and through small villages and mill towns.

While it is the purpose of a well established engineering department of a city to keep a constant supervision of the water shed, yet it is impossible to know if a gross pollution might not have been placed on the banks of the river twenty-four hours after an inspection has been made and the bank found to be clean.

The engineering department of the city of Pawtucket, realizing that the collection of stones and charcoal called a filter has no effect in removing any contaminating material from the water before it is pumped into the mains, had on file the several localities where contamination was present in greater or lesser amount as shown by the following record.

POINTS OF POLLUTION ON WATER-SHED OF ABBOTT RUN STREAM.

NUMBERS SHOW LOCATION WHERE POLLUTION EXISTS.

INSPECTION FROM FEBRUARY 11, 1904, TO MARCH 11,

1904.—EARLE O. SWEET.

1. The out buildings to both cottages on the Fiske estate are in a position to do damage to the water supply. The outhouse belonging to the cottage farthest north being the worse of the two. This outhouse has swill and manure piled up on the ground outside of the vault. The occupants of the house also throw dirty water from the door over the wall close to the pond. Swill is also disposed of in a like manner. I considered this a bad place.

2. There is a hog pen on top of bank, and underneath one of the buildings stands a pool of dark colored liquid, some of which has already gone over top of bank and down toward a small stream which empties into the Abbott Run stream. There is also a large amount of manure lying about upon the outside of the buildings, the liquid from which must go over top of bank to stream.

3. There is an outhouse upon the side of the bank of stream and

about sixty or seventy feet from stream. The vault is within one and one-half feet of being full and if it should get full it would flow directly to stream.

4. There is a pile of stable manure about twelve feet square and seven or eight feet high which stands about four or five feet from the water in the Abbott Run stream. The snow on ground between pile of manure and water has turned a very dark color. I considered this a bad place.

5. At the Henry A. Giles estate the sink drain empties upon the surface of the ground and flows around the northeast corner of the house, close to the outhouse on the premises, and down a steep bank into the Abbott Run stream. The vault of the outhouse is made of stone and partially cemented. The ice is badly discolored to the west of this building, making it look as if vault were not tight, which I believe to be the case. The bank from the outhouse to stream is very steep, so that the liquid reaches the stream quickly. I considered this a bad place.

6. There is a box at the back of the mill placed there for the purpose of catching the refuse from the water closets and sinks within the mill. The refuse in this box is piled at least one foot higher than the top of the box. The box contained so much solid matter that any liquid matter allowed to enter box must overflow and run down a concrete gutter into stream, which is about seventy feet, more or less, from box. I consider this a bad place.

7. There is a box in the field similar to the one at the mill. This box is filled with refuse and was probably taken from the mill and the one there at present put in its place. The refuse rises above the sides of the box.

8. The material used by the railroad company in making the fill across the pond is of a reddish color; and the ice and snow on the pond at the foot of the embankment is of the same red color, showing that the water that passes down the steep embankment carries along with it much of the material of which the bank is made.

9. On the east shore of the pond about one-half an acre of corn has been planted. Mr. Browning informs me that last spring manure lay in piles upon this ground. Allowing that the manure was spread upon the land, a great portion must get into the pond in the spring when the pond rises, or in case of a storm the water will wash it into pond. The corn was planted to the water's edge.

10. There is considerable filth lying about the outside of the ice houses close to pond.

11. This swamp is apparently the outflow for the water which falls upon the ground for a large section of the surrounding country. The hills are long and steep and all drain to this swamp. They are all cleared pasture land, the greater part of which is under cultivation. There are several houses with their barns and out buildings upon the hillsides. Undoubtedly much of the fertilizer placed upon the land finds its way into this swamp, and thence into the Abbott Run stream.

12. The remains of a dead horse lay unburied upon the bank of the little stream. The bank is quite steep, and the remains are 150 feet, more or less, from stream.

13. The outhouses belonging to the school house set upon the top of the bank about fifty feet from stream. In case the vaults should be allowed to overflow it would quickly reach the stream, as the bank is very steep.

14. On the E. P. Littlefield farm there is a large pile of manure outside of barn, and a dark colored liquid has run from bottom of pile down toward a small stream to the north. In case of a thaw this liquid would undoubtedly get into reservoir.

15. At the John Angell place the sink drain at the back of the house runs down a chute, then over the ground down a steep bank to the stream. There is a small building upon the edge of pond which has much filth upon the floor. Rabbits and dogs have been kept in this building. I should say that in the spring when the water is high it must flow into building.

16. The remains of two dead horses unburied lay upon the ground. They are a considerable distance from the stream.

17. At the Patrick McLaughlin farm a large amount of manure is under the barn, which has an open cellar. There are also large piles of manure outside of the barn. A very dark liquid has run from the bottom of the different piles of manure down toward the small brook, which flows to the reservoir. In case of a heavy rain or thaw much of this liquid must reach the stream.

18. There is a barn close to a small brook from which a dark liquid flows into brook. The liquid comes from manure in cellar of barn.

19. At the Lydia Whipple farm, there being no cellar to barn, the manure is piled up on the outside. The outhouse has no vault. There is a ditch dug from the side of the barn by the outhouse by the foot of the manure and down the slope to the stream. This ditch held about nine inches of a very dark colored liquid at a point near the manure pile. I considered this a bad place.

20. There is an outhouse with an open vault about 70 feet from stream. No discoloration on snow.

21. At the George W. Clark, Heirs, farm, the barn has an open cellar which drains to barn. Hogs are kept in a shed close by the brook. On the east side of the road there is an outhouse with an open vault about 15 feet from stream.

22. At Mrs. Drury's place the water has formed a little pond. The water in pond is in barn cellar, which contains some manure, and in hen coop and outhouses. The water from pond flows down side of road a little way, thence into brook.

23. At the James McLaughlin place there is an outhouse with an open vault about 70 feet from stream. There is also much filth lying about the place.

24. There is a large pile of stable manure on top of slope about 150 or 200 feet from pond. Much of this must get to pond when spread upon the land. On Alex. Thompson estate.

25. There is a large barn upon the Alex. Thompson farm which has a large amount of manure, both under and in piles outside of barn. The liquid, which is of a dark color, has flowed down the hill to the road, and when it thaws it must cross the road and get into the pond. This pond gets the wash from a large part of the surrounding country very soon after it starts to thaw, as the surrounding hills are very steep, and there are numerous small streams coming from them into the pond. The greater part of the land is under cultivation and is rich soil.

26. At the Pardon R. Whipple farm there is a great pile of manure outside of the barn, leaching from which is a dark colored liquid, which has gone across the field and into the brook near the road. There is much manure lying about upon the field close to the brook. Much of this fertilizer gets into brook.

27. At this point someone is throwing tin cans and other rubbish into the brook.

28. At the Levi Follett place, swill, ashes, and other debris are being dumped into water. There is quite a little pile of it. The water is high at present, when low this may not in any way pollute the water.

Analyses of samples collected at four different points on March 3, 7 and 8 were made, and confirmed the conclusions which were drawn from the sanitary inspections made. These analyses are not reproduced here, but are a matter of record in the laboratory of the Board.

The attention of the secretary of the Board was called to these conditions and some correspondence with the owners of the properties where these nuisances existed followed. Many but not all of them were removed. The city of Pawtucket through its inspector induced many of the owners of small properties to remove polluting matters as often as practicable.

In case any of those maintaining a nuisance should refuse or fail to remove the cause of pollution upon request, it would become necessary for the city of Pawtucket to bring a civil suit against such

persons in order to obtain results. This would entail friction and expense, and with the delay which is always associated with legal actions of this kind, the pollution, if dangerous, might be a continued source of danger.

In 1897 the city of Woonsocket had obtained legislation providing for such an emergency in its own case and under Chapter 491 of the Public Laws, it was possible for the city of Woonsocket to obtain immediate relief from such a danger through an order to be issued by the State Board of Health or its Secretary, directing the removal of any dangerous nuisances within a reasonable time. Also upon application of the Mayor of the city to the Appellate Division of the Supreme Court an injunction might be issued to enforce the orders of the State Board of Health.

At this time no other city or town had the power to obtain any such assistance. The city of Pawtucket therefore requested legislation which should give them the same privileges and power as Woonsocket. Other cities and towns, seeing the possibilities of pollution of their water supplies, also requested that this privilege might be given them at the same time. The city of Providence however did not avail itself of the opportunity to request such powers.

On April 12, 1904, at the January Session, the General Assembly passed an amendment to Chapter 491 of the Public Laws (Chapter 1178), which reads as follows:

SECTION 1. Section 1 of Chapter 491 of the Public Laws is hereby amended so as to read as follows:

"SECTION 1. No person shall throw or discharge, or suffer to be discharged from land owned, occupied, or controlled by him, into any stream, pond, or reservoir used as a source of water supply by the city of Woonsocket, the city of Pawtucket, the city of Newport, the town of Bristol, the town of Warren, the town of East Providence, the town of Narragansett, the town of Jamestown, the East Greenwich Fire District, or by any water company supplying water for domestic use in any of said cities or towns, or into any tributary or feeder of any such stream, pond, or reservoir, any sewerage, drainage, refuse or noxious or polluting matter of such nature as will corrupt or impair the quality of the waters of said stream, pond, or reservoir, or render the same injurious to health, which water

shall be of the recognized standard of purity to be determined by the state board of health or other recognized authority. But the provisions of this section shall not interfere with or prevent the enriching of land for agricultural purposes by the owner or occupant thereof, if no human excrement is used thereon. Any person violating the provisions of this section shall be punished for each offence by a fine of fifty dollars or by imprisonment for not to exceed thirty days or by both such fine and imprisonment."

SEC. 2. Section 2 of Chapter 491 is hereby amended so as to read as follows:

"SEC. 2. The state board of health or the secretary of said board, when satisfied that any sewerage, drainage, or refuse or polluting matter exists in a locality such that there is danger that said sewerage, drainage, or refuse or polluting matter may corrupt or impair the quality of said waters or render them injurious to health, may order the owner or occupant of the premises where said sewerage, drainage, or refuse or polluting matter exists to remove the same from said premises within such time after the serving of the notice prescribed in the next succeeding section as said board or secretary may designate; and if the owner or occupant neglects or refuses so to do he shall be fined twenty dollars for each day during which he permits said sewerage, drainage, or refuse or polluting matter to remain upon said premises after the time prescribed for the removal thereof."

SEC. 3. Section 3 of Chapter 491 is hereby amended so as to read as follows:

"SEC. 3. Such notice shall be in writing, signed by the secretary of the state board of health or the person performing the duties of that official, and shall be served by any sheriff, deputy sheriff or constable by reading the same in the presence or hearing of the owner, occupant, or his authorized agent, or by leaving a copy of the same in the hands or possession of, or at the last and usual place of abode of, said owner, occupant, or agent if within this state: *Provided, however,* that if said owner, occupant, or agent be a corporation incorporated in this state, said notice shall be served by leaving a copy thereof at the last and usual place of abode of the president or person performing the duties of president of said corporation. But if said premises are unoccupied, or the residence of the owner is unknown or without this state, or if the said owner is a corporation incorporated without this state, the notice may be served by posting a copy of the same on the premises and by advertising the same in some newspaper published in Providence county in such manner and for such length of time as the state board of health or the secretary thereof may determine."

SEC. 4. Section 4 of Chapter 491 is hereby amended so as to read as follows:

"SEC. 4. The secretary of the state board of health, when so directed by said board, shall prosecute for all violations of this chapter and shall not be required to give surety for costs upon complaints made by him; but the cities of Woon-

socket and Pawtucket and the towns of Bristol and East Providence shall be directly liable to the state for the costs incurred in the prosecution for violation of this chapter in their respective cases."

SEC. 5. Section 5 of Chapter 491 is hereby amended so as to read as follows:

"SEC. 5. The appellate division of the supreme court, upon the application of the mayors of said cities or the presidents of the town councils of said towns, or upon the application of the secretary of the state board of health, may issue an injunction to enforce the orders of the state board of health, or the secretary thereof, provided for in this chapter."

SEC. 6. All acts and parts of acts inconsistent herewith are hereby repealed, and this act shall take effect upon its passage.

The advantage of this law is that it provides for immediate action. If delays were permitted a nuisance might be a source of danger while the courts were transferring the case from docket to docket. It further makes the application of the law sufficiently flexible by placing the time of the action required in the judgment of the State Board of Health. The Board is naturally in a position to understand whether an existing nuisance is an immediate or remote source of danger and can adjust the requirements accordingly. If left to the action of a town council, too hasty action or dangerous delay might result. The person enjoined or warned is also better satisfied with the request of the Board, since he can more readily believe that the Board would be conservative in its action and free from local influences.

By the fall of 1904, the city of Pawtucket found the necessity of availing itself of the advantages of this new law.

A report was received by the State Board of Health from the city engineer's department of Pawtucket, that there was a specific nuisance on a small tributary of the "Abbott Run." The Secretary of the Board, in company with the City Engineer of Pawtucket, visited the premises where the nuisance was said to exist, and found that a farmer had established a large piggery on the water shed of the "Abbott Run." Hundreds of pigs were collected together in a confined area, and were being fed upon swill from the neighboring cities and towns. The drainage from these piggeries and from the swill-heaps ran directly into the little stream. Also many of the pigs were supplied

with drinking water and washing space on the edge of and in the small stream. The conditions without question constituted a source of pollution of the stream, and the Secretary of the Board at once notified the occupant of the premises where the nuisance existed by serving the following notice:—

November 8, 1904.

To Mr. —————

The undersigned, Secretary of the State Board of Health of the State of Rhode Island, being satisfied that certain sewerage, drainage, refuse and polluting matter, to wit, certain hog-pens and the drainage therefrom exist in a certain locality in the town of Cumberland, near Chapel Four Corners on land owned or occupied by you, in such a locality that there is danger that said sewerage, drainage, refuse and polluting matter may corrupt or impair the quality of the waters of Abbott Run, and of a certain tributary thereof, which said Abbott Run is used as a source of water supply by the city of Pawtucket, hereby orders and directs you, the said —————, being the owner or occupant of the premises above referred to where said sewerage, drainage, refuse and polluting matter exists, to remove the same from said premises within fourteen days from the service of this notice upon you. This notice is given you under the provisions of Chapter 491 of the Public Laws of Rhode Island as amended by Chapter 1178 of the Public Laws, and your attention is hereby called to the penalty prescribed by law for failure to comply with this notice.

(Signed)

GARDNER T. SWARTS,

Secretary, State Board of Health.

The result was all that could be desired. The owner of the premises immediately acknowledged the justice of the complaint and at once offered to remedy it by removing the piggeries. This he did and there was no further need of action required.

FEAR OF POLLUTION OF THE WOONSOCKET WATER SUPPLY.

In the early part of the year arrangements had been made to construct an electric car line between Providence and Woonsocket. The line was named the Providence and Burrillville Railway.

The survey for the line carried the road bed through a district which serves as a part of the watershed supplying a tributary of the Crook Falls Brook, known as Hendrick's Brook, which contributes to the water supply of the city of Woonsocket.

It was realized that a large number of workmen would be required for the advancement of this work and that the men employed would naturally be aliens unfamiliar with sanitary precautions. The attention of the Board having been called to these conditions and possibilities, the Secretary entered into correspondence with the officials of the line, calling attention to the danger which might arise from the careless deposit of human excrement upon the surface of the ground by the workmen employed upon the construction work, and in such a location that it might be washed into the streams supplying the city with its drinking water. The following correspondence ensued:

MAY 3, 1904.

MR. HERBERT M. YOUNG, SUPT.,
PROVIDENCE & BURRILLVILLE RAILWAY,
WOONSOCKET, R. I.

DEAR SIR:—The attention of this department has been called to the fact that it is the intention of your road to locate rails along the line of the watershed of the stream supplying water to the city of Woonsocket. As such an operation requires the employment and occupation of many irresponsible foreigners, may I ask that you assist this department, and the water department of Woonsocket, in locating the necessary privies to be used by your workmen in such a manner that no source of pollution may enter the stream, and also more especially, to instruct your foreman and workmen against the pollution of the stream by not using the conveniences provided.

The especial dangers which would come from such conditions would be the introduction of typhoid fever and other intestinal diseases into the city of Woonsocket. It must be remembered that the infection in typhoid fever may be carried by the urine as well as by foecal matter.

Hoping that you may be able to control the conditions with the mass of ignorance which you unfortunately have to deal with, and offering any assistance this department may be able to afford in the way of warnings or advice to the laborers, or any other way, I am,

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

MAY 3, 1904.

MR. E. W. KENT, SUPT.,

WOONSOCKET WATER WORKS,

WOONSOCKET, R. I.

DEAR SIR:—I enclose herewith copy of letter sent to Mr. H. M. Young. Please keep me posted at frequent intervals. I suppose the work has got to be done, and we have got to watch out for our own safety, and I think that you will be justified in accruing such expense as may be necessary to establish a frequent patrol of the stream while the work is going on.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

MAY 4, 1904.

GARDNER T. SWARTS, ESQ.,

PROVIDENCE, R. I.

DEAR SIR:—In reply to yours of recent date will say that I shall be only too glad to instruct my foreman in regard to the matter you wrote me about.

Respectfully yours,

(Signed) H. M. YOUNG, *Supt.*

MAY 6, 1904.

MR. E. W. KENT, SUPT.,

WOONSOCKET WATER WORKS,

WOONSOCKET, R. I.

DEAR SIR:—Referring to the letter to H. M. Young, Superintendent of the Providence and Burrillville Railway, I have received a statement from him that he would be only too glad to instruct his foreman in regard to the care of the excrement while the railway is being constructed. But he or his foreman

naturally cannot always be on the lookout and may forget the matter. A periodical inspection by one of your men would cause them to think of it often.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

That these precautions were warranted was shown by the reception of information in July to the effect that the road bed of the proposed railway had advanced to a point which carried it directly through the part of the watershed which had been previously under consideration and observation by the water department of Woonsocket.

It was also alleged that the workmen were utilizing the Hendrick's Brook which flows into the Crook Falls Brook for washing their clothing and were doing so directly in the stream.

The attention of the assistant general manager of the railway company being called to this statement, he immediately undertook to investigate the alleged conditions and to correct the same.

The following letters passed in this correspondence:

JULY 13, 1904.

MR. JOSEPH RAY, ASST. MANAGER,

WOONSOCKET STREET RAILWAY CO.,

WOONSOCKET, R. I.

DEAR SIR:—I have previously written to Superintendent Young and obtained his co-operation in an endeavor to prevent the pollution of the Woonsocket watershed by the laborers who are employed on your new line. Recent information has been received that these men are in the habit of washing their clothing in the stream, and I would ask if you would kindly look into the matter and give specific instructions to the foreman of the gang warning the men against this act. If you could assist me in this matter it would save me the trouble of hunting up the offenders and arresting them for the infringement of the General Laws.

Hoping that you may be able to understand the seriousness of their actions, I am,

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

JULY 13, 1904.

DR. W. C. MONROE,

HEALTH OFFICER,

WOONSOCKET, R. I.

DEAR DOCTOR:—I enclose copy of letter sent to Mr. Ray. I am afraid that it will not be sufficient and that we shall be obliged to go up there personally.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

JULY 14, 1904.

STATE BOARD OF HEALTH,

PROVIDENCE, R. I.

GENTLEMEN:—In reply to your letter written by your Secretary, informing me of the trouble caused by our laborers washing their clothes in your stream of water, would say that it is the first I have heard about it, but I will take the matter up immediately, for I fully appreciate the seriousness of it.

Yours truly,

(Signed) JOS. G. RAY, *Gen. Mgr.*

It was feared that whatever orders might be given by the manager to the contractors and by them to the foreman and in turn by the foreman to the workmen would not impress upon the laborers the dangers of the situation.

It was deemed wise, therefore, to be prepared to act promptly if the workmen failed to obey the orders given to them.

Warrants were issued by the district court and placed in the hands of a constable to be served if necessary upon any workman who was found to be disobeying the orders and placing polluting material in locations where it might enter the water supply.

The assistant manager of the railway was notified of this action and assistance offered to him in securing obedience of the workmen to the orders given.

The following correspondence passed:

JULY 19, 1904.

MR. E. W. KENT,
SUPT., WATER WORKS,
WOONSOCKET, R. I.

DEAR SIR:—I think that I have things straightened out now. If you will see the constable, Joseph T. Boulay, and ask him to call upon Mr. Arnold, Clerk of the District Court, I think that we can get matters into motion.

Yours truly,

(Signed) GARDNER T. SWARTS,
Secretary.

JULY 20, 1904.

DR. GARDNER T. SWARTS, SECRETARY,
STATE BOARD OF HEALTH,
PROVIDENCE, R. I.

DEAR SIR:—I am in receipt of your favor of the 19th inst., and have notified Mr. Boulay as requested.

I talked with the railroad officials in regard to moving the camp. They were perfectly willing that it should be moved and said the matter would rest with the Italian who supplied the laborers and at whose expense the camp was maintained.

Kindly advise me should any special line of action seem desirable to you, or should it appear that there are other steps that can be taken to move the settlement.

Yours truly,

(Signed) E. W. KENT, *Supt.*

JULY 19, 1904.

MR. J. G. RAY,
ASST. MANAGER WOONSOCKET RAILWAY,
WOONSOCKET, R. I.

DEAR SIR:—I thank you for your offer of assistance in preventing if possible the pollution of the Woonsocket water supply by the laborers of the railway. I fear, however, it will be necessary to make an example of one or two of them in order to prevent its continuance. In reports which I have received subsequent to your communications, I am informed that the head of the gang was instructed to take proper precautions and he promised to caution the men. Immediately after this, however, the men were washing their clothing in the brook as before, and some of them are making the boast that they do their washing at four o'clock in the morning, and thus would be able to disobey the request.

From statements of the Superintendent of the Water Works, Mr. Kent, it would seem as if the camp itself was located in rather close proximity to the watershed of the brook, and as the camp will probably be obliged to remain there for a long period the danger of the pollution of the stream with foecal matter increases daily. I would like to ask if it would not be practical for your company to relocate the camp at some point on the Blacksone watershed and away from the present location.

I should not feel justified in assuming the responsibility of guaranteeing that the stream might not be polluted, and as the General Laws oblige me to take this responsibility, in a measure I feel a little uneasy in the matter.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

JULY 20, 1904.

MR. GARDNER T. SWARTS,

SECRETARY OF BOARD OF HEALTH,

PROVIDENCE, R. I.

DEAR SIR:—Your letter of July 19th at hand. I saw Mr. Kent yesterday, and advised him to arrest one or two of them if caught polluting the water, for they are a class of people who will dare you until you turn on them, but they are easily scared when they see that you mean business. I do not think that you will have any trouble after one or two of them have had to pay a fine.

I also saw their camp foreman, and he said that he would fine them five dollars if he caught any of them washing in the stream.

As to moving the camp, it belongs to the man in Boston who furnishes us with the men, so we have nothing to do with the camp itself.

Trusting that the matter will soon be settled satisfactorily, I am,

Yours truly,

(Signed) JOS. G. RAY,

Asst. Gen. Mgr.

That there might be co-operation with the departments of the city of Woonsocket, the following communication was forwarded, and the reply, as given, received:

JULY 18, 1904.

MR. E. J. FRANCE,

CITY SOLICITOR,

239 MAIN ST., WOONSOCKET, R. I.

DEAR SIR:—Complaints have been entered to this department that the employees of the Woonsocket Railway Company are washing their clothing in the stream which supplies the city of Woonsocket with water. Under Chapter 1178 page 58, of the General Laws, passed at the January Session, 1904, I shall make an endeavor to arrest one or two of these men and bring them before the District Court of Woonsocket.

As this matter involves the city's interest and comes very close to the public, I thought that possibly you might desire to represent the case before the District Court; if not, or if it is not convenient, the Attorney General will secure representation for the State. If you will kindly let me know what would be your pleasure in the matter I can inform Mr. Stearns.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

JULY 19, 1904.

GARDNER T. SWARTS,

SEC'Y OF STATE BOARD OF HEALTH.

DEAR SIR:—In reply to your letter of the 18th inst. in relation to the pollution of the watershed of the Crook Fall Brook by railroad employees would say I will cheerfully co-operate with you in this matter, and by way of suggestion would say if the offensive act is within the town of North Smithfield, the 12th District Court at Woonsocket would be the proper place to bring the complaint, but if in Lincoln, the 11th District Court at Central Falls, or if in Smithfield, the 9th District Court, before Judge Harris. Mr. Edward H. Rathbun, of this city, is largely interested in the construction of the railway, and he and his family of children live in Woonsocket, and presumably use this water. Would not a note from you to him prove effective?

Yours truly,

(Signed) ERWIN J. FRANCE,

City Solicitor.

JULY 21, 1904.

MR. ERWIN J. FRANCE,

CITY SOLICITOR,

WOONSOCKET, R. I.

DEAR SIR:—I was very glad to receive your statement of willingness to assist us in working up the cases of pollution of the Woonsocket water supply as you are familiar with court procedures, the judge, and the local conditions.

I am informed that the acts referred to occurred in North Smithfield, and I have taken out my warrants before Mr. Arnold, Clerk of the District Court of Woonsocket. I thank you for the suggestion in reference to Mr. Edward H. Rathbun, and will state that I had already had several communications with Mr. Joseph G. Ray, Assistant Manager, and Mr. Young, the Superintendent, both of whom were pleased to give us every assistance that they could, and had warned the camp foreman, who in turn, claims to have warned the laborers. In spite of this, immediately after, the men proceeded to wash their clothes in the brook and made boasts of the fact that they would continue to do so, illustrating their intentions by stating that they got up at four o'clock in the morning in order to accomplish it.

From what Mr. Kent states I should judge that it will be necessary to move the camp to some other locality over into the watershed of the Blackstone. I understand that the control of this camp belongs to a man in Boston, who furnishes the men, and that the railway company does not assume the responsibility of it. If he shows no disposition to assist us, I presume it will be necessary to obtain an injunction, either under the special law in regard to water supplies, or under the common law or some other kind of law.

Mr. Ray agrees with my desire to arrest one or two of these men since they will not submit to regulations unless they know that there is some penalty attached to the act.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

That there might be no misunderstanding of the condition of affairs and for the purpose of placing the responsibility of action upon all those who had connection with the work and those who had immediate control of the laborers, the following request was made:

JULY 28, 1904.

MR. G. FERRULLO,
33 NORTH SQUARE
BOSTON, MASS.

DEAR SIR:—I am informed that you as contractor for the building of the Woonsocket Street Railway Company have charge and control of the construction camp used by the laborers upon that line and which is now located in the town of North Smithfield.

Information has been received at this department which leads the writer to believe that the location of the camp is a source of danger and a menace to the health of the people of the city of Woonsocket, owing to the possibility of the water supply of that city being dangerously polluted by the excrement from the laborers living in the camp.

I am informed that the camp is located on the watershed of the Woonsocket water supply, and have also been informed that it is feasible to re-locate the camp on the watershed of the Blackstone River, which is a stream not used for drinking purposes.

I desire to ask if you cannot find it practicable to at once relocate this camp away from the watershed or slope supplying the brook which flows into the Woonsocket reservoir.

Hoping that you will see the pressing necessity of immediate action for this end, I remain,

Yours truly,

(Signed) GARDNER T. SWARTS,
Secretary.

No answer being received to this request, the following tracer was sent:

AUG. 1, 1904.

MR. G. FERRULLO,
33 NORTH SQUARE,
BOSTON, MASS.

DEAR SIR:—Having received no answer to my communication of July 28th, I will telegraph today to ascertain if you have received the same. It is extremely important that this matter be attended to at once, and I would ask your kind and urgent consideration of the same.

Yours truly,

(Signed) GARDNER T. SWARTS,
Secretary.

The work of the Board in making monthly analyses of all the water supplies in the State, presented its value as an indication of the condition of the water and whether any possibility of contamination existed previously or at the present time. With so full a knowledge of the situation as was supplied by the local press, which pressed the matter daily, the following assurance was of value in allaying any cause for immediate fear of danger to the consumers of the water.

AUG. 2, 1904.

MR. E. W. KENT,

SUPT. WATER WORKS,

WOONSOCKET, R. I.

DEAR SIR:—Thinking that the results of the Woonsocket Water Supply might be of interest to you at the present time I send the results for July. They show a fairly good condition although extremely high in color and in odor.

As yet I have received no word from the Manager of the Woonsocket Street Railway Company, nor from the owner of the construction camp, although I have written and telegraphed. I have heard that he was looking the camp over on Saturday and had some proposition to make to the city in the way of assisting him in its removal, which proposition to my mind was absurd inasmuch as he placed the danger there and it should be his duty to remove it.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

AUGUST 3, 1904.

DR. GARDNER T. SWARTS, SECRETARY,

STATE BOARD OF HEALTH,

PROVIDENCE, R. I.

DEAR SIR:—I acknowledge receipt of your letter of 2nd inst., with copy of water analyses, Woonsocket supply, for July, 1904. I am not able to talk with Mr. G. Ferrullo, this morning, in relation to moving the construction camp, as he is away for the day.

I have written to him and will follow up the letter with telephone message as soon as I can reach him.

Yours truly,

(Signed) E. W. KENT, *Supt.*

About this time the Secretary, with Superintendent Kent, and Chairman Norton, a member of the water commissioners of Woonsocket, made a thorough inspection of the construction camp on the water shed. It was found that the camp had been located upon the slope or water shed leading to Hendrick's Brook. A rough wooden bunk house had been erected for sleeping purposes and for supplying the workmen with meals. A small sod hut had been erected near the bunk house for the storage of provisions. A rough enclosure had been provided for use as a privy-vault. They did not seem disposed, however, to utilize this vault, partially on account of the fact that it was not sufficiently covered in to give satisfactory privacy. As a consequence and possibly for their own convenience they had utilized the surface of the ground throughout the woods and on the water slope. All along the side of the paths and through the woods innumerable deposits of excrement were discovered all the way down as far as Hendrick's Brook. At the time of the visit, Hendrick's Brook was practically dry, except at certain points where pools of water had accumulated in the depressed portions of the brook. Excrement was found in and near these pools and it was stated that at these points the men utilized the pool for washing their clothes. Report had also been received that men had been found swimming or bathing in the reservoir nearby, but this report was not fully verified. In and about the bunk house the camp itself was extremely neat and clean. No presence of slops upon the grounds or swill were found. On the line of the roadbed where the railway was being constructed by filling and excavating, a privy was placed upon the side of the road. The foreman was requested to place this upon the line of the filling in the rear of the work as it progressed, in order that the excrement might be covered from time to time with the filling of the roadbed, and not rest upon the surface of the ground beside the road. This request was promptly complied with.

As indicating a step toward the successful solution of these troubles the following letter is of interest:

MR. E. W. KENT,

AUGUST 5, 1904.

SUPT., WOONSOCKET WATER WORKS,
WOONSOCKET, R. I.

DEAR SIR:—Mr. Ray called upon me this noon, and although calling his attention to the extreme delay in the action taken in his matter, I have made a statement to him which you will find in enclosed copy of letter. I have taken this chance believing it may solve the difficulty for all of us, but personally think it will not work.

Yours truly,

(Signed) GARDNER T. SWARTS,
Secretary.

The proposition referred to in above letter is shown by the text of the following letter from the Secretary of the State Board of Health to Mr. Ray:

MR. J. G. RAY, ASST. MANAGER,

AUG. 5, 1904.

WOONSOCKET STREET RAILWAY CO.,
WOONSOCKET, R. I.

DEAR SIR:—Confirming our conversation of this date and statements made by me, I will say in reference to the request that the Italian camp located on the Woonsocket and Providence Railway be placed in a sanitary condition, that resting upon your belief that Mr. Ferrullo, the contractor, will be able to confine the excretions of the laborers within the bounds of a privy vault and that he can give assurance that no excrement will be placed outside of the vault on the watershed of the Woonsocket reservoir, and if said vault shall be so located and properly equipped with conveniences before Sunday noon, that such condition will be satisfactory to me personally.

It is to be agreed by Mr. Ferrullo that every deposit of foecal matter now located on the watershed will be turned over and covered with soil. It is also understood that if at the end of two weeks this expedient is found impracticable Mr. Ferrullo will agree to move the camp off the watershed of the Woonsocket Water Company.

I do not intend by this statement to obligate in any way the local authorities of Woonsocket, but have notified them of this letter.

Awaiting the agreement to these conditions from Mr. Ferrullo, I am,

Yours truly,

(Signed) GARDNER T. SWARTS,
Secretary.

MR. J. G. RAY, ASST. MANAGER,
WOONSOCKET STREET RAILWAY CO.,
WOONSOCKET, R. I.

AUG. 13, 1904.

DEAR SIR:—Referring to my communication of August 5th, 1904, I am obliged to state that I have received no acknowledgment of receipt of same nor have I received any statement from Mr. Ferrullo as to whether the conditions stated in my communication were accepted by him.

I write to you direct inasmuch as you assumed the position as his agent at the time of making your last proposition.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

After much delay and unseemly lack of attention on the part of the contractor an agreement was received from him through Mr. Ray.

AUG. 16, 1904.

MR. J. G. RAY, ASST. MANAGER,
WOONSOCKET STREET RAILWAY CO.,
WOONSOCKET, R. I.

DEAR SIR:—I desire to acknowledge receipt of the agreement from Mr. Ferrullo and thank you for forwarding the same. I hope that he will be able to accomplish what is asked of him, that the matter may be thus settled without further trouble.

Yours truly,

(Signed) GARDNER T. SWARTS,

Secretary.

While the general statutes provided that the Secretary of the State Board of Health or the mayor of the city of Woonsocket might, in their discretion, place an injunction upon the people causing the nuisance to abate the same within a reasonable time, yet it was deemed advisable to permit the contractors to attain the results desired without invoking any such procedure. It was to be regretted that the contractors or the sub-contractors, should have ignored the request of the authorities and caused delay, however, upon their promise, under the circumstances, permission was given to the con-

tractors to maintain the camp at the point where it was located under the condition that they would confine the men to the camp and oblige them to use the vault placed in the camp, and also to turn over the soil at every point where excrement could be found in the woods, and take great care of the same that it might not be washed into the brook by a heavy rain-fall. Two weeks' trial of this provision was granted, and the result seemed to be satisfactory to all concerned. During this period the water supply had been examined from time to time, and monthly, as usual, by the State Board of Health, and the water at the pumping station and in the city was found to be as good in quality as at any previous time, the only objection to the supply being, as it has always been, that it is dark in color and not agreeable in taste in the warm weather.

Great interest was shown during the investigation by the local press of Woonsocket, who gave a great deal of time and attention to the question, investigated by personal examinations, and stimulated the local authorities to assist the State department and the local water works board in the effort to place matters in a safe condition.

INDEX TO 1904 REPORT.

	PAGE.
Accidents, deaths from.....	141, 145
Antitoxin, for diphtheria.....	7
Apoplexy, deaths from.....	141, 143, 145
Appendicitis, deaths from.....	141
Appropriation, Tuberculosis.....	5
Diphtheria.....	7
General work of Board.....	10
Barrington, report from health officer.....	16
report from town clerk.....	16
Births.....	138-140
Board, State Board of Health, meetings of.....	8
personel of.....	II, 10
Brain diseases, deaths from.....	141, 145
Bristol, report from health officer.....	17
report from town clerk.....	16
water supply of.....	2-3, 4, 75-76
water supply of, analyses of.....	93-94
Bronchitis, deaths from.....	141, 143, 145
Burrillville, report from health officer.....	25
report from town clerk.....	25
Cancer, deaths from.....	141-143, 145
Central Falls, report from city clerk.....	26
report of city engineer, extract from.....	26-27
Central Falls, report from health officer.....	26
sewage, analyses of.....	120-123
sewage disposal of.....	26-27, 114
Cerebral hemorrhage.....	141
City clerks, circular to.....	12
extracts from reports of.....	11-71
Charlestown, report from health officer.....	61
report from town clerk.....	61

	PAGE.
Child-birth, deaths from.....	145
Cholera infantum, deaths from.....	141, 143, 145
Consumption, deaths from.....	141-143, 145
Consumptives, sanatoria for.....	6-7, 171-174
Contagious diseases.....	1, 146-152
Coventry, report from health officer.....	17
report from town clerk.....	17
Cranston, report from health officer.....	27
report from town clerk.....	27
Croup, deaths from.....	145
Cumberland, report from health officer.....	28
report from town clerk.....	28
Deaths.....	138-145
table of, from certain diseases.....	141
Decedents, longevity of.....	141
Diabetes, deaths from.....	141
Diarrhœa, deaths from.....	145
Diphtheria, appropriation for.....	7
deaths from.....	141, 143, 145
examinations of cultures for.....	7, 160-162
examinations of cultures for, tables.....	162
number of cases of.....	147, 149
Dysentery, deaths from.....	141, 145
East Greenwich, report from health officer.....	18
report from town clerk.....	17
water supply of.....	4, 74
water supply of, analyses.....	85-86
East Providence, report from health officer.....	29
report from town clerk.....	28
water supply of.....	4, 5, 74, 182-186
water supply of, analyses.....	106-107
Enteritis, deaths from.....	141
Examinations under medical practice act.....	8, 165-168
Exeter, report from health officer.....	61
report from town clerk.....	61
Feeble Minded, attempt to secure a school for.....	9

	PAGE.
Foster, report from health officer.....	29
report from town clerk.....	29
Glocester, report from health officer.....	29
report from town clerk.....	29
Health officers, circular to.....	13
extracts from reports of.....	11-71
Heart disease, deaths from.....	141, 142, 144, 145
Hillsgrove Tuberculosis Hospital.....	7, 173-174
Hopkinton, report from health officer.....	61
report from town clerk.....	61
Influenza, deaths from.....	141, 142, 144
Jamestown, report from health officer.....	19
report from town clerk.....	18
water supply of.....	4, 75
water supply of, analyses.....	101-103
Johnston, report from health officer.....	30
report from town clerk.....	29
Kidneys, diseases of, deaths from.....	141, 142, 144, 145
Law, new, on protection of certain water supplies.....	4-5, 8, 192
Licenses to practice medicine, number issued.....	8, 166
to practice medicine, revocation of a.....	8, 168-170
Lincoln, report from health officer.....	30
report from town clerk.....	30
Little Compton, report from health officer.....	19
report from town clerk.....	19
Liver diseases, deaths from.....	141
Lobo, Jose P. F. M., revocation of license of.....	8, 168-170
Locke, Rev. George L., re-appointment of.....	10
Marriages.....	138-140
Measles, deaths from.....	141, 145
number of cases of.....	147, 152
Medical practice act, work under.....	8, 165-170
Meteorology.....	127-137
Middletown, report from health officer.....	19
report from town clerk.....	19

	PAGE.
Mortality, comparative, from eighteen diseases.....	145
ratios of.....	142-145
Narragansett, report from health officer.....	62
report from town clerk.....	62
Narragansett Pier, water supply of.....	3, 4, 75
water supply of, analyses.....	95-97
Newport, report of board of health, extracts from.....	20-24
report from city clerk.....	20
report from health officer.....	20
water supply of.....	2, 4, 75
water supply of, analyses.....	98-100
New Shoreham, report from health officer.....	24
report from town clerk.....	24
water supply of.....	74
water supply of, analyses.....	108-109
North Kingstown, report from health officer.....	62
report from town clerk.....	62
North Providence, report from health officer.....	30
report from town clerk.....	30
North Smithfield, report from health officer.....	31
report from town clerk.....	31
Old age, deaths from.....	141
Paralysis, deaths from.....	145
Pawtucket, report of board of public works, extract from.....	32
report from city clerk.....	31
report of city engineer, extract from.....	33-38
report from health officer.....	32
sewage, analyses of.....	116-119
sewage disposal of.....	33-38, 113-114
water supply of.....	3, 4, 5, 74, 76, 186-195
water supply of, analyses.....	90-92
Pawtuxet Valley, water supply of.....	74
water supply of, analyses.....	83-86
Physicians, examination of, to practice.....	8, 165-168
Pine Ridge Camp.....	7, 172-173
Pneumonia, deaths from.....	141, 142, 144, 145
Portsmouth, report from health officer.....	24
report from town clerk.....	24

	PAGE.
Protection of water supplies, new law.....	4-5, 8, 192
Providence, report of city engineer, extracts from.....	39-46
report of superintendent of health, extracts from.....	46-59
sewage analyses of.....	126
sewage disposal of.....	44-46, 114-115
sewerage data.....	44-46
water supply of.....	3, 72-73, 74
water supply of, analyses.....	78-82
water works data.....	39-44
Ratios of mortality.....	141-145
Revocation of license to practice medicine.....	8, 168-170
Richmond, report of health officer.....	63
report of town clerk.....	63
Sanatoria for consumptives.....	6-7, 171-174
Sanatorium, State, for consumptives.....	6, 171-172
Scarlet fever, deaths from.....	141, 142, 144, 145
number of cases.....	147, 150
Scituate, report from health officer.....	59
report from town clerk.....	59
Sewage, analyses of.....	116-126
examination of.....	4, 112-126
Small-pox, deaths from.....	143, 144
number of cases.....	147
Smithfield, report from health officer.....	59
report from town clerk.....	59
South Kingstown, report from health officer.....	63
report from town clerk.....	63
Spit-cups, distribution of.....	6
Steamboats, inspection of.....	9, 175-181
St. Louis Fair.....	9
Tiverton, report from health officer.....	25
report from town clerk.....	25
Town clerks, circular to.....	12
extracts from reports of.....	11-71
Tuberculosis.....	5-7
appropriation for.....	5
examination of sputum.....	5, 153-158
examination of sputum, tables.....	156, 158

	PAGE.
Tuberculous diseases, deaths from.....	141-143, 145, 158-159
Typhoid fever, deaths from.....	141, 144, 145
number of cases.....	147, 151
Widal test for.....	5, 163-164
Widal test for, tables.....	164
Undertakers and embalmers, attempt at legislation to license.....	8
Wakefield, water supply of.....	3, 4, 75
water supply of, analyses.....	95-97
Warren, report from health officer.....	17
report from town clerk.....	17
water supply of.....	2-3, 4, 75-76
water supply of, analyses.....	93-94
Water analyses.....	78-111
averages for the year.....	110-111
Water supplies.....	1-5, 72-111, 182-209
examination of.....	3-4, 72-111
protection of.....	4-5, 8, 192
Warwick, report from health officer.....	18
report from town clerk.....	18
Westerly, ordinances pertaining to health matters.....	63-69
report from health officer.....	70
report from town clerk.....	63-70
water supply of.....	3, 74
water supply of, analyses.....	104-105
water works data.....	70-71
West Greenwich, report from health officer.....	18
report from town clerk.....	18
Whooping cough, deaths from.....	141, 145
Widal test for typhoid fever.....	5, 163-164
table.....	164
Woonsocket, report from city clerk.....	59
report of city engineer, extract from.....	60-61
report from health officer.....	59
sewage, analyses of.....	124-125
sewage disposal of.....	60-61, 114
water supply of.....	1-2, 4, 74, 196-209
water supply of, analyses.....	87-89

FIFTY-FIRST REPORT

RELATING TO THE

REGISTRY AND RETURN

OF

Births, Marriages, and Deaths,

AND OF DIVORCE,

IN THE

STATE OF RHODE ISLAND,

FOR THE

YEAR ENDING DECEMBER 31, 1903.

PREPARED BY

GARDNER T. SWARTS, M. D.

STATE REGISTRAR OF VITAL STATISTICS; SECRETARY OF THE STATE BOARD OF HEALTH;
COMMISSIONER OF PUBLIC HEALTH.

PROVIDENCE:

E. L. FREEMAN & SONS, STATE PRINTERS.

1905.

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GARDNER T. SWARTS, *Secretary*.

State of Rhode Island and Providence Plantations.

PROVIDENCE, R. I., January 14, 1905.

To the Honorable the General Assembly:

The fifty-first Annual Report upon the Registration of Births, Marriages, and Deaths in Rhode Island, and including judicial procedure in relation to divorce, during the year 1903, with compendary tables of the results of registration in the previous years, is herewith respectfully submitted.

The plan of the preceding years, in regard to the general arrangement of the tables, summaries, and comments, has been followed in this report, except that Table IX of the yearly report of causes of deaths has been re-adjusted to conform to the nomenclature of the so-called Bertillon system.

While this classification does not reach a perfection which may be desired by all registrars, it has been adopted in order that it may be in conformity with the registration reports of all other principal cities and States having a system of registration. It also places the report in conformation with the registration reports of Canada and other foreign countries, which have agreed to adopt this system at this time.

In the special tables the object has been to present the important facts of many years of registration, as well as of single years, in such manner as to make them readily apparent and relieve the reader of the statistics of much of the labor of personal examination of each of the general tables of the preceding reports for the purpose of ascertaining the relation the various facts bear to each other.

Respectfully,

GARDNER T. SWARTS,

State Registrar.

CONTENTS.

See INDEX, page 301.

GENERAL TABLES.

TABLE I. General summary of the births, marriages, and deaths, in 1903, in each town and each county in the State, showing the number of births, the sex and parentage of those born; the number of marriages, with the nativity of those married; the number of deaths, with the sex and nativity of those who died; the aggregate and average age of the decedents of each sex, and of the whole number of decedents whose age was given.....	2-5
TABLE II. Births; showing the number of each sex born in each month of the year, in the several divisions of the State.....	6-7
TABLE III. Plurality births; arranged by months, sexes, and divisions of the State, and showing the nativity of the parents.....	8
TABLE IV. Marriages; the number in each month and in each quarter of the year, in the several divisions of the State.....	9
TABLE V. Deaths; showing the number of decedents of each sex in each month, in the several divisions of the State.....	10-11
TABLE VI. Deaths; showing the number of each sex that died at certain stated periods of life in each town and divisions of the State; also the population of every town and division, with the percentage of deaths to population.....	12-19
TABLE VII. Causes of death and season, in 1903, arranged alphabetically; showing the number of decedents of each sex from each cause, in each month and in the whole year, the number of native born and foreign born, and also the number of native and of foreign parentage for the whole year.....	20-35
TABLE VIII. Causes of death, and age; arranged alphabetically, and showing the number of decedents of each sex from each cause, in each period of life.....	36-47
TABLE IX. Classification (International) and percentage; showing the number and percentage of deaths from each cause and in each class of causes, in the whole State, and in each division of the State, in 1903.	48-59
TABLE X. International classification of causes of death in Rhode Island, in each of the fifty-one years 1853-1903.....	60-75

TABLE XI. Occupations and ages at death; showing the number and the aggregate and average age at death of the decedents, in each occupation and class of occupations, in the whole State, for 1903 and for 51 years and 7 months, ages under 20 omitted.....	76-87
TABLE XII. Occupations and causes of death; showing the number in each occupation and class of occupations, who died from each specified cause, during 1903, omitting ages under 20.....	88-104
TABLE XII. Supplemental Diseases.....	105-107

SPECIAL TABLES, RESULTS, AND COMMENTS.

Births, Marriages, and Deaths. Tables XIII-XVI.....	111-120
Diagram I. Birth Rates.....	122-123
BIRTHS. Special Results. Tables XVII-XXX.....	125-142
MARRIAGES. Special Results. Tables XXXI-XLIII.....	143-157
DIVORCES. Tables XLIV-XLV.....	158-163
DIVORCES. Ratio of, to Marriage, different States. Table XLVI.....	164
DEATHS. Special Results. Tables XLVII-XCII.....	166-258
Diagram II. Death Rates.....	180-181
Diagram III. Death Rates.....	274
Returns of the Medical Examiners.....	277-280
International Classification (Bertillon).....	281-283
Laws in Relation to Vital Statistics.....	285-289
Synopsis of the Law of Marriage.....	290, 291
Laws in Relation to Divorce.....	292-294
Laws in Relation to Medical Examiners and Coroners.....	294-299
Index.....	301

REPORT UPON THE REGISTRATION
OF
BIRTHS, MARRIAGES, AND DEATHS
IN
RHODE ISLAND,
FOR
THE YEAR ENDING DECEMBER 31, 1903,
AND
FOR VARIOUS YEARS FROM 1853 TO 1903,
INCLUSIVE.

TABLE I.

General Summary of Births and Marriages in the State of Rhode Island during the year 1903.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.							MARRIAGES.				
	Whole Number.	SEX.		PARENTAGE.				Whole Number.	NATIVITY.			
		Males.	Females.	Native.	Foreign.	Native Father. Foreign Mother.	Foreign Father. Native Mother.		Native.	Foreign.	Native Groom. Foreign Bride.	Foreign Groom. Native Bride.
Barrington.....	26	15	11	5	16	5		9	8	1		
Bristol.....	136	69	67	50	55	15	16	60	30	15	7	8
Warren.....	182	95	87	24	117	19	22	58	23	27	4	4
BRISTOL COUNTY.	344	179	165	79	188	39	38	127	61	43	11	12
Coventry.....	160	84	76	68	63	16	13	23	17	2	1	3
East Greenwich..	30	14	16	16	11	1	2	28	18	3	3	4
West Greenwich..	11	6	5	11				1	1			
Warwick.....	724	339	385	199	367	74	84	193	77	61	21	34
KENT COUNTY.	925	443	482	294	441	91	99	245	113	66	25	41
Jamestown.....	23	14	9	14	6	2	1	6	5	1		
Little Compton..	20	15	5	7	11		2	3	2			1
Middletown.....	35	16	19	12	22	1		5	5			
NEWPORT CITY..	526	260	266	223	202	59	42	201	106	53	20	22
New Shoreham..	18	11	7	17	1			8	6		1	1
Portsmouth.....	46	26	20	18	26	2		8	7	1		
Tiverton.....	72	38	34	25	31	8	8	25	18	2		5
NEWPORT COUNTY.	740	380	360	316	299	72	53	256	149	57	21	29
Burrillville.....	181	90	91	58	67	29	27	70	31	14	6	19
CENTRAL FALLS.	607	309	298	122	350	52	83	164	55	52	24	33
Cranston*.....	294	142	152	114	141	18	21	62	36	16	3	7
Cumberland.....	223	108	115	59	100	33	31	81	29	26	13	13
East Providence..	308	174	134	138	114	35	21	92	68	14	3	7
Foster.....	14	5	9	14				20	19			1
Glocester.....	35	17	18	29	3	1	2	9	9			
Johnston.....	149	72	77	30	91	11	17	33	7	22	2	2
Lincoln.....	312	175	137	25	227	31	29	73	17	36	14	6
North Providence.	66	31	35	20	33	6	7	3	2	1		
North Smithfield.	71	44	27	27	24	13	7	12	4	4	2	2
PAWTUCKET.....	1,034	520	514	296	483	132	123	444	207	114	60	63
PROVIDENCE CITY.	4,935	2,525	2,410	1,500	2,626	384	431	2,258	939	815	237	247
Scituate.....	59	32	27	43	8	5	3	11	8	1	2	
Smithfield.....	48	22	26	17	19	5	7	19	14	1	3	1
WOONSOCKET.....	1,006	491	515	158	610	113	125	294	93	110	38	53
PROVIDENCE COUNTY.	9,342	4,757	4,585	2,650	4,890	868	934	3,625	1,538	1,226	407	454
Charlestown.....	23	11	12	17	3	2	1	5	3	2		
Exeter.....	6	3	3	5			1	7	7			
Hopkinton.....	45	27	18	38	2	1	4	14	11		2	1
Narragansett.....	14	6	8	7	6	1		7	5			2
North Kingstown.	73	32	41	53	5	7	8	25	19		4	2
South Kingstown..	77	36	41	66	3	7	1	36	27	3	3	3
Richmond.....	18	7	11	13	3	1	1	4	3	1		
Westerly.....	174	94	80	67	74	16	17	122	73	29	10	10
WASHINGTON COUNTY.	430	216	214	266	96	34	34	220	148	35	19	18

* State Institutions not included.

TABLE I.—Continued.

General Summary of Deaths in the State of Rhode Island during the year 1903.

DEATHS.												
Whole Number.	SEX.		NATIVITY.		AGES GIVEN.		AGGREGATE AGE IN YEARS.		AVERAGE AGE IN YEARS.		Aggregate Age.	Average Age.
	Males.	Females.	Native.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.		
21	11	10	17	4	11	10	587	529	53.36	52.90	1,116	53.14
150	84	66	111	39	84	66	3,872	2,872	46.10	43.52	6,744	44.96
106	52	54	78	28	51	54	1,074	1,743	21.06	32.28	2,817	26.83
277	147	130	206	71	146	130	5,533	5,144	37.90	38.82	10,677	38.83
99	50	49	79	20	50	48	1,637	1,772	32.74	36.92	3,409	34.79
60	25	35	51	9	25	35	1,234	1,681	49.36	48.03	2,915	48.58
10	7	3	9	1	7	3	456	97	65.14	32.33	553	55.30
401	202	199	290	111	202	199	5,396	6,660	26.71	33.47	12,056	30.06
570	284	286	429	141	284	285	8,723	10,210	30.71	35.82	18,933	33.27
9	5	4	8	1	5	4	193	191	38.60	47.75	384	42.67
16	11	5	15	1	11	5	502	180	45.64	36.00	682	42.62
17	10	7	13	4	10	7	416	308	41.60	44.00	724	42.58
359	187	172	255	104	187	172	7,864	7,235	42.05	42.06	15,099	42.06
24	13	11	24	5	13	11	519	496	39.92	45.09	1,015	42.29
39	23	16	34	5	23	16	835	759	36.30	47.44	1,594	40.87
69	36	33	53	16	36	33	1,333	975	37.03	29.54	2,308	33.45
533	285	248	402	131	285	248	11,662	10,144	40.92	40.91	21,806	40.91
108	57	51	77	31	57	51	1,527	1,746	26.79	34.24	3,273	30.30
339	162	177	224	115	162	177	3,315	4,804	20.46	27.14	8,119	23.95
226	108	118	172	54	108	118	3,721	4,448	34.45	37.69	8,169	36.15
143	79	64	86	57	79	63	2,932	2,428	37.11	38.54	5,360	37.74
229	106	123	181	48	105	122	3,850	4,549	36.67	37.29	8,399	37.00
29	13	16	29	5	13	16	794	971	61.08	60.69	1,765	60.86
39	19	20	37	2	19	20	1,014	1,303	53.36	65.15	2,317	59.41
87	55	32	71	16	55	32	1,792	909	32.58	28.41	2,701	31.05
161	83	78	99	62	83	78	2,320	2,763	27.95	35.42	5,083	31.57
49	27	22	35	14	27	22	939	940	34.78	42.73	1,879	38.35
34	24	10	29	5	24	10	682	509	28.41	50.90	1,191	35.03
664	325	339	438	226	323	339	9,960	10,945	30.84	32.29	20,905	31.58
3,895	2,028	1,867	2,726	1,169	2,028	1,867	62,757	64,099	30.95	34.33	126,856	32.57
74	39	35	65	9	39	35	1,792	1,523	45.95	43.61	3,315	44.80
38	21	17	27	11	21	17	998	936	47.52	55.06	1,934	50.89
489	232	257	322	167	232	257	5,948	7,135	25.64	27.76	13,083	26.75
6,604	3,378	3,226	4,618	1,986	3,375	3,224	104,341	110,008	30.92	34.12	214,349	32.48
21	11	10	15	6	11	10	648	554	58.91	55.40	1,202	57.24
10	4	6	10	5	4	6	165	274	41.25	44.00	439	43.90
51	26	25	46	5	26	25	1,552	1,567	59.69	62.68	3,119	61.16
21	12	9	19	2	12	9	568	537	47.33	57.67	1,105	52.62
65	33	32	57	8	32	31	818	1,410	25.56	45.48	2,228	35.37
82	38	44	71	11	38	44	1,840	2,346	48.42	53.32	4,186	51.05
29	21	8	26	3	19	8	725	556	38.16	69.50	1,281	47.44
132	70	62	114	18	70	62	2,463	2,551	35.19	41.15	5,014	37.98
411	215	196	358	53	212	195	8,779	9,795	41.41	50.23	18,574	45.64

TABLE 1.—Continued.—RECAPITULATION.

*General Summary of Births and Marriages in the State of Rhode Island
during the year 1903.*

COUNTIES.	BIRTHS.							MARRIAGES.				
	Whole Number.	SEX.		PARENTAGE.				Whole Number.	NATIVITY.			
		Males.	Females.	Native.	Foreign.	Native Father. Foreign Mother.	Foreign Father. Native Mother.		Native.	Foreign.	Native Groom. Foreign Bride.	Foreign Groom. Native Bride.
BRISTOL.....	344	179	165	79	188	39	38	127	61	43	11	12
KENT.....	925	443	482	294	441	91	99	245	113	66	25	41
NEWPORT.....	740	380	360	316	299	72	53	256	149	57	21	29
PROVIDENCE.....	9,342	4,757	4,585	2,650	4,890	868	934	3,625	1,538	1,226	407	454
WASHINGTON.....	430	216	214	266	96	34	34	220	148	35	19	18
STATE INSTITUTIONS.....												
WHOLE STATE.....	11,781	5,975	5,806	3,605	5,914	1,104	1,158	4,473	2,009	1,427	483	554

TABLE 1.—Concluded.—RECAPITULATION.

*General Summary of Deaths in the State of Rhode Island, by Counties,
during the year 1903.*

DEATHS.												
Whole Number.	SEX.		NATIVITY.		AGES GIVEN.		AGGREGATE AGE IN YEARS.		AVERAGE AGE IN YEARS.		Aggregate Ages.	Average Age.
	Males.	Females.	Native.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.		
277	147	130	206	71	146	130	5,533	5,144	37.90	38.82	10,677	38.83
570	284	286	429	141	284	285	8,723	10,210	30.71	35.82	18,933	33.27
533	285	248	402	131	285	248	11,662	10,144	40.92	40.91	21,806	40.91
6,604	3,378	3,226	4,618	1,986	3,375	3,224	104,341	110,008	30.92	34.12	214,349	32.48
411	215	196	358	53	212	195	8,779	9,795	41.41	50.23	18,574	45.64
247	152	95	135	112	152	95	7,673	4,915	50.48	51.74	12,588	50.96
8,642	4,461	4,181	6,148	2,494	4,454	4,177	146,711	150,216	32.94	35.96	296,927	34.40

TABLE II.—BIRTHS, 1903.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.									
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.
January	Males. . . .	540	13	40	7	32	83	26	50	234	36	19
	Females. . .	461	14	31	5	24	67	22	38	200	42	18
	Total. . . .	1,001	27	71	12	56	150	48	88	434	78	37
February	Males. . . .	497	18	37	10	19	75	28	49	212	33	16
	Females. . .	432	11	34	4	15	60	27	41	190	38	12
	Total	929	29	71	14	34	135	55	90	402	71	28
March.	Males. . . .	503	11	43	12	18	72	22	42	210	51	22
	Females. . .	534	17	33	8	18	89	31	41	229	40	28
	Total. . . .	1,037	28	76	20	36	161	53	83	439	91	50
April.	Males. . . .	450	8	39	7	19	75	31	27	183	45	16
	Females. . .	438	11	25	7	29	62	27	38	181	41	17
	Total. . . .	888	19	64	14	48	137	58	65	364	86	33
May	Males. . . .	443	15	32	10	17	65	24	43	177	45	15
	Females. . .	473	11	35	13	24	71	24	40	197	37	21
	Total. . . .	916	26	67	23	41	136	48	83	374	82	36
June	Males	485	13	31	6	25	66	18	44	212	43	27
	Females. . .	434	15	42	5	27	58	27	36	169	42	13
	Total. . . .	919	28	73	11	52	124	45	80	381	85	40
July	Males. . . .	539	14	37	18	18	83	28	39	242	40	20
	Females. . .	533	17	41	14	17	73	27	57	217	44	26
	Total. . . .	1,072	31	78	32	35	156	55	96	459	84	46

TABLE II.—BIRTHS.—Concluded.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.									
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.
August.....	Males....	478	13	40	9	28	72	20	38	209	32	17
	Females.	515	7	49	12	23	72	31	43	209	53	16
	Total....	993	20	89	21	51	144	51	81	418	85	33
September...	Males....	491	17	32	8	26	78	23	36	217	38	16
	Females.	496	17	56	4	20	68	27	50	199	43	12
	Total....	987	34	88	12	46	146	50	86	416	81	28
October.....	Males....	512	21	38	9	16	83	25	50	207	45	18
	Females.	530	20	49	10	22	94	25	49	209	38	14
	Total....	1,042	41	87	19	38	177	50	99	416	83	32
November...	Males....	514	19	42	12	18	81	31	40	210	42	19
	Females.	454	14	49	2	13	65	11	38	194	49	19
	Total....	968	33	91	14	31	146	42	78	404	91	38
December...	Males....	523	17	32	12	24	79	33	62	212	41	11
	Females.	506	11	38	10	34	69	19	43	216	48	18
	Total....	1,029	28	70	22	58	148	52	105	428	89	29
Whole State.	Males....	5,975	179	443	120	260	912	309	520	2,525	491	216
	Females.	5,806	165	482	94	266	848	298	514	2,410	515	214
	Total....	11,781	344	925	214	526	1,760	607	1,034	4,935	1,006	430

TABLE III.—PLURALITY BIRTHS,—1903.

Arranged by Months, Sexes, and Divisions of the State; and showing the Nativity of the Parents.

MONTHS.		SEX.	Number of children.	DIVISIONS OF THE STATE.						NATIVITY OF THE PARENTS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
				Bristol County.	Kent County.	Newport County.*	Newport City.	Providence County.†	Providence City.	Washington County.	American.	British American.	English.	French Canadian.	German.	Irish.	Italian.	Portuguese.	Russian.	Scotch.	Swedish.	American and British-American.	American and French-American.	American and English.	American and French-Canadian.	American and German.	American and Irish.	Austrian and Russian.	British American.	English and American.	French Canadian and Irish.	French Canadian and American.	Irish.	German and American.	German and Venezuelan.	Irish and American.	Irish and English.	Irish and French-Canadian.	Norwegian and Swedish.	Portuguese and American.	Romanian and Russian.	Scotch and American.	West Indian and American.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
January.	14	Males.	16	1	1	1	1	4	2	2	1	2	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1</

*Not including Newport city.

†Not including Providence city.

TABLE IV.—MARRIAGES, 1903.

Arranged by Months and Divisions of the State.

MONTHS.	Whole State, 1903.	DIVISIONS OF THE STATE.										Whole State, 1902.
		Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	
January.....	332	8	22	4	13	45	14	35	149	23	19	326
February.....	368	14	26	...	14	35	16	33	176	38	16	266
March.....	167	6	9	6	9	17	6	10	85	11	8	178
First Quarter.....	867	28	57	10	36	97	36	78	410	72	43	770
April.....	358	9	16	2	20	39	12	44	176	27	12	434
May.....	320	8	24	...	13	42	8	27	155	28	15	274
June.....	599	19	30	7	25	52	29	70	288	41	38	490
Second Quarter....	1,277	36	70	9	59	133	49	141	619	96	65	1,198
July.....	278	7	13	4	10	25	10	35	145	21	8	303
August.....	377	13	21	3	23	39	18	30	190	22	18	297
September.....	432	12	25	8	24	56	20	29	210	25	23	403
Third Quarter....	1,087	32	59	15	57	120	48	94	545	68	49	1,003
October.....	456	12	22	5	18	48	7	55	249	17	23	446
November.....	537	17	29	7	22	58	21	51	275	34	23	506
December....	249	2	8	9	9	29	3	25	140	7	17	213
Fourth Quarter....	1,242	31	59	21	49	135	31	131	664	58	63	1,165
Whole Year.....	4,473	127	245	55	201	485	164	444	2,238	294	220	4,136

TABLE V.—DEATHS, 1903.

Arranged by Months, Sexes, and Divisions of the State.

MONMHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.										
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	State Institutions.
January.....	Males.....	392	11	24	9	11	60	15	27	180	21	24	10
	Females..	420	10	27	7	17	64	25	40	194	16	18	2
	Total.....	812	21	51	16	28	124	40	67	374	37	42	12
February....	Males.....	406	10	31	9	17	45	13	27	206	21	18	9
	Females..	376	9	35	10	10	57	21	32	151	26	19	6
	Total.....	782	19	66	19	27	102	34	59	357	47	37	15
March.....	Males.....	415	18	19	8	15	57	17	22	205	20	20	14
	Females..	355	19	26	5	12	46	12	39	149	20	17	10
	Total.....	770	37	45	13	27	103	29	61	354	40	37	24
April.....	Males.....	384	11	29	10	21	51	11	18	170	27	14	22
	Females..	342	8	23	9	16	54	6	22	153	29	14	8
	Total.....	726	19	52	19	37	105	17	40	323	56	28	30
May.....	Males.....	347	8	21	9	20	55	16	25	152	17	13	11
	Females..	347	9	28	2	18	55	19	23	146	22	17	8
	Total.....	694	17	49	11	38	110	35	48	298	39	30	19
June.....	Males.....	303	12	22	4	7	38	7	24	152	12	15	10
	Females..	302	6	18	7	16	43	12	18	152	13	11	6
	Total.....	605	18	40	11	23	81	19	42	304	25	26	16
July.....	Males.....	415	15	18	10	13	68	19	31	187	18	19	17
	Females..	410	10	24	10	15	53	20	36	195	16	23	8
	Total.....	825	25	42	20	28	121	39	67	382	34	42	25

TABLE V.—DEATHS, 1903.—Concluded.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.										
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	State Institutions.
August.....	Males.....	427	12	25	9	12	54	15	42	187	30	29	12
	Females..	362	7	21	4	15	54	18	31	152	24	20	16
	Total.....	789	19	46	13	27	108	33	73	339	54	49	28
September...	Males.....	385	19	27	9	18	59	12	29	167	14	17	14
	Females..	310	18	22	8	13	35	8	27	134	19	21	5
	Total.....	695	37	49	17	31	94	20	56	301	33	38	19
October.....	Males.....	351	6	30	8	17	50	12	30	158	13	18	9
	Females..	302	12	19	7	14	42	12	16	131	28	12	9
	Total.....	653	18	49	15	31	92	24	46	289	41	30	18
November...	Males.....	290	10	25	3	18	41	7	22	112	24	14	14
	Females..	301	9	23	3	12	44	6	24	143	22	8	7
	Total.....	591	19	48	6	30	85	13	46	255	46	22	21
December....	Males.....	346	15	13	10	18	53	18	28	152	15	14	10
	Females..	354	13	20	4	14	39	18	31	167	22	16	10
	Total.....	700	28	33	14	32	92	36	59	319	37	30	20
Whole year...	Males.....	4,461	147	284	98	187	631	162	325	2,028	232	215	152
	Females..	4,181	130	286	76	172	586	177	339	1,867	257	196	95
	Total.....	8,642	277	570	174	359	1,217	339	664	3,895	489	411	247

TABLE VI.—DEATHS, 1903.

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1903, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each Sex.
Barrington.....	21	1,068	19.7	Males.....	11
				Females..	10
Bristol.....	150	7,505	20.0	Males.....	84
				Females..	66
Warren.....	106	5,389	19.7	Males.....	52
				Females..	54
BRISTOL COUNTY.....	277	13,962	19.8	Males.....	147
				Females..	130
Coventry.....	99	5,403	18.3	Males.....	50
				Females..	49
East Greenwich.....	60	2,707	22.2	Males.....	25
				Females..	35
West Greenwich.....	10	564	17.7	Males.....	7
				Females..	3
Warwick.....	401	22,922	17.5	Males.....	202
				Females..	199
KENT COUNTY.....	570	31,596	18.0	Males.....	284
				Females..	286
Jamestown.....	9	1,907	4.7	Males.....	5
				Females..	4
Little Compton.....	16	1,151	13.9	Males.....	11
				Females..	5
Middletown.....	17	1,565	10.9	Males.....	10
				Females..	7
NEWPORT CITY.....	359	23,233	15.5	Males.....	187
				Females..	172
New Shoreham.....	24	1,443	16.6	Males.....	13
				Females..	11
Portsmouth.....	39	2,188	17.8	Males.....	23
				Females..	16

TABLE VI.—DEATHS, 1903.—Continued.

Exhibiting the Number of Deaths in each Period of Life, in every Town and Division of the State.

PERIODS OF LIFE.																	Age unstated.
Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.		
2				1	1			1		2	2	2	3				
12	3	2	1	1	1		5	4	3	3	8	15	19	5	2		
15	2				1	1		5	3	6	7	9	9	8			
12	7	4	2	1			1	3	5	5	4	2	1	2		1	
13	5	1	2			2	3	5	1	4	2	7	5	3	1		
24	10	6	3	3	2	1	8	9	8	7	14	19	23	7	2	1	
30	7	1	2		1	3	3	11	4	11	10	16	16	14	1		
12	4	1	1		6			2	2	3	4	5	7	3			
10	3	1			3		4	4	1	2	4	5	5	5	1	1	
5							2		3	1	2	3	3	3	3		
6	2	1			1			3	1	2	2	3	5	6	3		
2									1		1	1	3	1			
63	21	4	4	3	10	3	2	6	14	7	24	17	18	5	1		
50	10	2	4	5	5	4	5	13	14	13	18	13	27	14	2		
80	25	5	5	3	16	3	4	8	20	11	31	26	31	12	4		
68	15	4	4	5	9	4	9	20	16	17	24	21	37	25	7	1	
2											1	1	1				
								1	1		1	1					
2	1							1		1	1	2	2	1			
1	1							1					1	1			
2				1			1	1			1		2	1	1		
2					1				1					2	1		
23	6		5	1	5	1	14	12	18	15	24	30	20	11	2		
29	1	2	1	3	6	4	4	17	8	21	15	20	23	13	5		
4								2		2			4	1			
1			1				1		1	2	1	2	1	1			
7	1							2	2	3	1	2	2	3			
4								1	2			4	2	2	1		

TABLE VI.—DEATHS, 1903.—Continued.

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1903, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each sex.
Tiverton.....	69	3,068	22.5	Males.....	36
				Females.....	33
NEWPORT COUNTY.....	533	34,557	15.4	Males.....	285
				Females.....	248
Burrillville.....	108	6,730	16.0	Males.....	57
				Females.....	51
CENTRAL FALLS.....	339	18,803	18.0	Males.....	162
				Females.....	177
Cranston.....	226	13,364	16.9	Males.....	108
				Females.....	118
Cumberland.....	143	9,392	15.2	Males.....	79
				Females.....	64
East Providence.....	229	13,791	16.6	Males.....	106
				Females.....	123
Foster.....	29	1,148	25.3	Males.....	13
				Females.....	16
Glocester.....	39	1,340	29.1	Males.....	19
				Females.....	20
Johnston.....	87	5,282	16.5	Males.....	55
				Females.....	32
Lincoln.....	161	9,495	16.9	Males.....	83
				Females.....	78
North Providence.....	49	3,443	14.2	Males.....	27
				Females.....	22
North Smithfield.....	34	2,283	14.9	Males.....	24
				Females.....	10
PAWTUCKET.....	664	44,784	14.8	Males.....	325
				Females.....	339
PROVIDENCE CITY.....	3,895	191,937	20.3	Males.....	2,028
				Females.....	1,867

TABLE VI.—DEATHS, 1903.—Continued.

Exhibiting the number of Deaths in each Period of Life, in every Town and Division of the State.

Under 1 year.	PERIODS OF LIFE.															Age unstated.
	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	
9	1	1	1	2	1	.....	.....	2	1	2	2	6	4	2	2	.....
11	1	1	.....	.....	3	.....	1	1	3	1	2	4	3	2	.....	.....
49	9	1	6	4	6	1	15	20	21	23	30	41	35	19	5	.....
48	3	3	2	3	10	4	6	21	16	24	19	31	30	21	7	.....
18	3	5	1	2	2	.....	.....	2	4	3	7	2	4	4	.....	.....
11	1	1	2	1	2	1	2	2	5	5	5	6	5	2	.....	.....
59	11	8	6	2	6	2	3	8	17	11	9	14	4	2	.....	.....
54	13	7	5	2	3	1	4	12	14	13	13	19	11	5	1	.....
21	12	3	2	3	2	.....	.....	5	11	9	7	15	12	5	1	.....
23	9	5	1	.....	4	.....	2	9	6	8	11	14	14	12	.....	.....
18	5	1	1	.....	.....	1	2	7	5	8	4	13	11	3	.....	.....
14	2	.....	1	1	1	.....	2	3	4	5	9	13	3	5	.....	1
23	6	1	.....	.....	3	2	2	7	9	13	10	11	9	7	2	1
23	7	2	1	2	3	2	6	10	8	8	10	17	13	9	1	1
.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	1	2	3	3	1	.....
.....	.....	.....	.....	.....	1	.....	.....	3	1	1	1	.....	4	5	.....	.....
2	1	.....	1	.....	.....	.....	.....	.....	1	1	2	3	5	3	.....	.....
.....	1	.....	.....	.....	.....	.....	.....	1	1	2	1	3	4	6	1	.....
16	4	.....	3	.....	1	1	.....	2	4	5	2	8	5	4	.....	.....
10	2	1	1	.....	3	.....	.....	2	1	2	1	5	3	1	.....	.....
25	4	3	2	1	1	1	5	5	7	6	6	9	5	3	.....	.....
17	3	2	.....	1	2	3	3	3	5	7	11	11	7	3	.....	.....
6	1	.....	.....	.....	1	2	.....	2	1	2	8	1	2	1	.....	.....
4	2	2	.....	.....	.....	.....	.....	1	.....	.....	4	3	3	3	.....	.....
11	1	2	.....	.....	.....	.....	.....	.....	2	1	1	.....	4	2	.....	.....
1	.....	.....	.....	.....	.....	.....	1	1	.....	1	1	2	2	1	.....	.....
84	17	7	2	2	12	2	11	23	21	24	35	39	30	13	1	2
72	23	6	5	3	6	5	3	28	29	24	39	33	39	20	4	.....
485	138	57	41	18	60	17	34	178	195	169	195	220	137	76	8	.....
410	121	44	28	24	49	22	36	117	143	163	215	204	168	99	24	.....

TABLE VI.—DEATHS, 1903.—Continued.

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1903. geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each sex.
Scituate.....	74	3,493	21.2	Males.....	39
				Females.....	35
Smithfield.....	38	2,045	18.6	Males.....	21
				Females.....	17
WOONSOCKET.....	489	31,536	15.5	Males.....	232
				Females.....	257
PROVIDENCE COUNTY.....	6,604	358,866	18.4	Males.....	3,378
				Females.....	3,226
Charlestown.....	21	1,011	20.8	Males.....	11
				Females.....	10
Exeter.....	10	822	12.2	Females.....	4
				Females.....	6
Hopkinton.....	51	2,572	19.8	Males.....	26
				Females.....	25
Narragansett.....	21	1,586	13.2	Males.....	12
				Females.....	9
North Kingstown.....	65	4,069	16.0	Males.....	33
				Females.....	32
South Kingstown.....	82	5,324	15.4	Males.....	38
				Females.....	44
Richmond.....	29	1,485	19.5	Males.....	21
				Females.....	8
Westerly.....	132	7,908	16.7	Males.....	70
				Females.....	62
WASHINGTON COUNTY.....	411	24,777	16.6	Males.....	215
				Females.....	196
STATE INSTITUTIONS.....	247	2,452	100.7	Males.....	152
				Females.....	95

TABLE VI.—DEATHS, 1903.—Continued.

Exhibiting the Number of Deaths in each Period of Life, in every Town and Division of the State

PERIODS OF LIFE.																	Age un- stated.
Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.		
7	...	...	...	...	1	2	1	1	1	1	4	7	6	7	1	...
6	2	...	...	...	1	1	1	2	5	...	1	8	3	5	...	...
4	1	...	...	...	...	...	...	2	1	1	2	3	4	3	...	...
3	...	...	...	...	...	...	...	2	...	1	1	3	3	2	2	...
79	17	3	4	7	7	3	11	11	13	15	16	26	12	7	1	...	
60	19	8	3	6	18	4	7	25	21	24	16	19	13	14	...	...
858	222	90	63	35	96	34	69	253	293	269	309	373	253	143	15	3	
708	205	78	47	40	93	39	67	221	243	264	339	360	295	192	33	2	
1	...	...	...	...	...	1	...	1	1	2	3	2	1	1	1	...
1	...	...	...	...	1	2	...	1	...	...	...	1	1	2	...	...
2	...	...	...	...	...	...	...	2	...	2	1	3	...	2	...	...
...	...	...	...	...	...	...	...	1	2	...	1	...	4	1	...	...
2	...	...	...	...	...	...	...	2	...	2	1	3	...	2	...	...
...	...	...	...	...	...	...	...	1	2	...	1	...	4	1	...	...
2	...	...	...	...	1	...	...	3	1	2	5	7	6	2	3	1
6	...	...	...	...	1	...	...	4	1	2	5	5	4	2	1	1
6	1	1	...	...	...	1	...	2	2	4	3	6	9	...	3	...
5	2	...	...	...	...	...	1	1	3	4	4	9	7	6	2	...
2	2	2	...	1	1	...	...	1	1	1	...	1	4	3	...	2
...	...	...	...	...	...	...	...	...	...	1	...	4	1	2	...	...
17	4	3	...	1	2	1	2	6	2	5	5	7	9	5	1	...	
18	3	2	2	1	3	...	1	6	6	2	4	6	11	5	2	...	
33	7	6	...	2	5	2	2	16	9	16	19	28	41	17	9	3	
23	5	2	2	1	5	3	2	12	13	12	17	29	38	25	6	1	
1	...	...	...	...	...	...	3	17	30	24	20	29	18	10	...	...
2	...	2	...	...	...	1	...	7	11	16	20	15	16	4	4	...

TABLE VI.—DEATHS, 1903.—Continued.

(RECAPITULATION.)

Exhibiting the Whole Number, the Proportion to Population, and Number of each Sex, in every Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Total Deaths.	Population, 1903, geometrically estimated.	Deaths per 1,000 of population.	DEATHS.	
				SEX.	Number of each Sex.
BRISTOL COUNTY.....	277	13,962	19.8	Males.....	147
				Females.....	130
KENT COUNTY.....	570	31,596	18.0	Males.....	284
				Females.....	286
NEWPORT COUNTY.....	533	34,557	15.4	Males.....	285
				Females.....	248
PROVIDENCE COUNTY.....	6,604	358,866	18.4	Males.....	3,378
				Females.....	3,226
WASHINGTON COUNTY.....	411	24,777	16.6	Males.....	215
				Females.....	196
STATE INSTITUTIONS.....	247	2,452	100.7	Males.....	152
				Females.....	95
WHOLE STATE.....	8,642	466,210	18.5	Males.....	4,461
				Females.....	4,181

TABLE VI.—DEATHS, 1903.—Concluded.

(RECAPITULATION.)

Exhibiting the Number of Deaths in each Period of Life, in every Division of the State.

PERIODS OF LIFE.																	Age unstated.
Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.		
24	10	6	3	3	2	1	8	9	8	7	14	19	23	7	2	1	
30	7	1	2	...	1	3	3	11	4	11	10	16	16	14	1	..	
80	25	5	5	3	16	3	4	8	20	11	31	26	31	12	4	..	
68	15	4	4	5	9	4	9	20	16	17	24	21	37	25	7	1	
49	9	1	6	4	6	1	15	20	21	23	30	41	35	19	5	..	
48	3	3	2	3	10	4	6	21	16	24	19	31	30	21	7	..	
858	222	90	63	35	96	34	69	253	293	269	309	373	253	143	15	3	
708	205	78	47	40	93	39	67	221	243	264	339	360	295	192	33	2	
33	7	6	...	2	5	2	2	16	9	16	19	28	41	17	9	3	
23	5	2	2	1	5	3	2	12	13	12	17	29	38	25	6	1	
1	...	.....	.....	.....	.....	.....	3	17	30	24	20	29	18	10	.....	..
2	...	2	.....	.....	.....	1	.....	7	11	16	20	15	16	4	1	..
1045	273	108	77	47	125	41	101	323	381	350	423	516	401	208	35	7	
879	235	90	57	49	118	54	87	292	303	344	429	472	432	281	55	4	

TABLE VII.—CAUSES OF DEATH, 1903.

Arranged Alphabetically; showing the Number of each Sex who died from each cause, in each month and in the whole year 1903; also the Number of Native-born and Foreign-born, and also the Number of Native and of Foreign Parentage, from each cause, for the year.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Abcess of Abdomen.....																														
Brain.....												1																		1
Cheek.....								1					1																	2
Face.....																														1
Liver.....																														1
Lung (non-tuberculous).....	1							1																						3
Pancreas.....	1																													5
Pelvis.....																														1
Rectum.....			1																											1
Side.....									1																					1
Mastoid.....								1																						1
Peritonsillar.....																														1
Retropharyngeal.....																														1
Multiple.....																														1
Accidents,* Asphyxia.....	3	3	1		2	3	1	3					3		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Bicycle.....																														1
Burns and Scalds.....	2	4	3	1		2	2	5		1																				1
Drowning.....	2	3	2		3	1	7	1	1	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
																														3

* See table LXI of this report.

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.				PARENT-AGE.		SEX.		
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		Am. For.		Am. For.		M. F.		M. F.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	M.	F.	
Accidents, Electric Car.....	..	..	..	..	1	..	..	..	1	..	1	..	2	..	1	..	1	..	1	..	1	1	2	..	8	4	5	7	10	2	..	..
Electric Shock.....	..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	3	1	3	1	4	..	..	..
Elevator.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2	..	2	..	..	..	..
Exposure to Cold.....	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	3	2	3	2	4	1	..	..
Falls.....	5	4	3	3	4	6	2	1	2	2	3	3	2	6	5	6	1	3	8	3	5	2	43	36	29	50	45	34	45	34	..	..
Firearms.....	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	2	..	2	3	..	5	4	1	1	6	..	..
Heat.....	..	..	..	..	..	..	..	..	..	..	1	6	..	..	..	..	..	..	..	..	..	..	..	6	1	4	3	1	1	..	..	..
Lightning.....	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..
Machinery.....	1	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	1	..	1	..	..	1	..	2	3	..	5	5	..	..	..	..
Poison.....	2	1	..	1	..	1	..	1	..	2	1	2	..	6	3	3	3	6	7	2
Railroad.....	4	5	..	5	4	4	1	5	1	1	1	2	6	3	1	5	..	3	..	3	..	3	39	13	19	33	19	33	45	7	..	..
Various other.....	3	3	..	6	1	4	1	4	4	..	4	4	3	6	3	3	7	..	2	1	..	..	33	22	18	37	18	37	46	9	..	..
Addison's Disease.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	1	..	..	..	..
Alcoholism.....	4	2	1	..	3	..	1	4	2	1	6	1	1	..	4	..	7	..	2	2	4	2	28	19	15	32	39	8	..	..	..	..
Delirium Tremens.....	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	..	3	3	3	..	..	..	..
Anemia.....	2	..	..	..	..	1	..	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	5	..	2	3	4	1	..	..	..	..
Pernicious.....	1	1	1	1	1	..	..	3	..	3	2	2	..	1	2	3	..	2	2	..	..	18	8	14	12	8	18	7	4	..	..	..
Aneurism of Aorta.....	..	1	..	..	1	..	1	..	..	..	..	..	2	..	1	..	2	1	..	..	..	..	1	1	4	4	7	1	1	..	..	..
Abdominal Aorta.....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..	..	..	1	1	..	2	1	1	..	..	..	..
Angina Pectoris.....	5	1	1	1	1	3	2	1	..	2	1	2	2	4	..	2	..	2	1	3	1	2	25	12	25	12	22	15	..	..	..	..
Apoplexy.....	8	19	12	8	9	11	8	12	6	11	7	6	9	12	6	8	6	11	2	11	4	9	8	16	133	86	119	100	85	134	..	..
Appendicitis.....	3	2	3	..	2	3	2	3	1	1	4	4	3	4	7	6	3	..	3	1	1	2	2	3	48	15	30	33	34	29	..	..
Arthritis, Osteo.....	1	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	1	1	..	1	..	2	..	..	..	..

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.
Arthritis, Septic, of Knee.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
Asthma.....	1	3	1	2	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	5	8	4	9	5	8
Atelectasis, Pulmonum.....	1	1	...	...	...	1	...	...	1	...	...	...	...	...	1	...	2	...	1	...	1	1	1	1	10	...	6	4	8	2
Atheroma of Arteries.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	1	4	...	3	1	1	3
Brain, Congestion of.....	...	1	...	1	...	1	...	...	2	1	...	1	1	...	...	...	1	...	...	...	...	...	...	1	1	...	2	8	4	6
Softening.....	1	...	...	3	...	...	...	...	2	...	...	2	1	...	...	...	1	...	3	...	...	...	...	1	9	...	8	6	9	5
Bronchitis, Acute.....	16	18	14	26	15	14	12	10	10	6	4	3	7	3	2	7	3	4	8	9	5	9	7	198	24	68	154	108	114	108
Chronic.....	1	...	3	4	2	4	5	...	2	3	...	1	3	1	...	2	1	2	1	1	1	1	2	15	28	11	32	20	23	
Calculi, Renal.....	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	2	...	2	2
Cancer of Abdominal Viscera.....	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	2	...	...	...	...	...	...	...	1	3	...	4	2	2	2
Back.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
Bladder.....	1	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	1	...	...	...	...	...	...	...	...	4	3	4	3	4
Breast.....	2	...	4	...	2	...	2	...	5	...	3	...	1	...	1	...	8	...	5	...	6	...	5	30	14	21	23	...	44	
Cecum.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	...	...	1
Cheek.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Chin.....	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Colon.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1
Duodenum.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	2
Esophagus.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Eyelid.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...
Face.....	1	2	...	2	...	...	...	...	...	...	...	...	2	...	...	1	...	1	...	1	...	1	...	...	7	3	6	4	8	2
Gall Bladder.....	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	2	...
Groin.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	1	...	2	1	1

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		Am. For.		Am. For.		M. F.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.
Cancer of Hand.....																	1								1				1	
Head (frontal region).....											1														1					1
Intestine.....	2	1	1	2	1		1	1	1	2	1	2	1											14	6	11	9	9	11	
Jaw.....								1																1					1	
Kidney.....			1	1																		1		1	2	1	2	2	1	
Leg.....								1																	1				1	
Lip.....								1								1			2					1	4	1	4	5		
Liver.....	3	1	3	2	1	5	1	4	2	5	2	3	2		2			2	1	1	2	2	4	28	18	21	25	17	29	
Lung.....	1							1										1						4		3	1			4
Mediastinal Gland.....								1																	1				1	
Neck.....								1		1															1	1	1	1	2	
Nose.....									1																1				1	
Omentum.....								1							1									1	2	2	1	3	2	2
Pancreas.....			1																					2					2	
Parotid Gland.....																									1				1	
Pelvic Bone.....																1								1					1	
Pleura.....																								1		1			1	
Prostate Gland.....																													1	
Pylorus.....	1																												1	
Rectum.....	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1									5	9	4	10	9	5	
Sigmoid Flexure.....																													1	
Stomach.....	2	7	3	4	3	3	3	5	4	3	2	3	5	4	3	4	7	2	2	2	4	2	3	36	45	28	53	37	44	
Testicle.....	1																							1					1	

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.				PARENT-AGE.		SEX.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.		
Cancer of Throat.....																									1	1	1	1	1	1	1	
Tongue.....																									2	2	2	2	2	2	2	
Tonsil.....																1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Uterus.....	5	6			5	4	4	4	6	4	4	5	5	5	5	5	5	2	2	5	5	5	5	5	34	22	26	30	...	56		
Vulva.....								1	1	1	1													2	2	2	2	2	2	2		
General.....																								1	1	1	1	1	1	1		
Carbuncle.....	1	1			1				1	1	1								1	1				2	2	2	2	2	3	1		
Cerebritis.....						1			1	1	1									1				2	2	1	1	1	1	1		
Chicken-pox.....						1			1	1	1													1	1	5	6	10	...	16		
Childbirth*.....			1	1	1	5						3	3		1	1	1	1	1	1	1	1	3	11	5	6	10	1	1	1		
Placenta Previa.....	1																							1	1	1	1	1	1	1		
Post-partum, Hemorrhage.		2	2									2	2											1	1	5	1	5	...	6		
Puerperal Nephritis and Eclampsia.....					1				2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	2	6	...	8			
Puerperal Peritonitis.....		1			1			1	1	1	1								1	1	1	1	1	4	...	2	2	...	4			
Puerperal Septicemia.....	3	2	1	3	1	3	1	3	3	3	3	1	3	3	3	3	3	3	1	1	1	1	2	10	15	5	20	...	25			
Chlorosis.....					1							1	1	1	1	1	1	1	1	1	1	1	1	...	2	2	2	2	2	2		
Cholecystitis.....																		1	1	1	1	1	1	...	2	2	2	2	2	2		
Cholera Infantum.....	1	1	1	1	1	3	1	3	3	16	8	50	47	51	38	37	30	15	13	6	4	2	2	328	7	110	225	186	149	...		
Morbus.....	1																1	1	1	1	1	1	1	2	1	2	1	3	...	3		
Colitis (under 2 years).....												1	1	1	1	1	1	1	1	2	1	1	2	9	...	6	3	3	6	...		
Enteritis (under 2 years).....	2	1	1	1	1	1	1	1	3	3	10	7	12	3	5	4	1	1	2	1	1	1	1	58	1	18	41	37	22	...		
Ileo (under 2 years).....	1														1	1	2	2	2	2	2	2	3	...	3	2	2	2	2	2		

* Not otherwise classified.

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.		Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.			
		M		F		M		F		M		F		M		F		M		F		M		F									
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Am.	For.	M.	F.		
Colitis (over 2 years).....								1								2	2	1	1							5	2	4	3	4	3		
Enterocolitis (over 2 years).....															7	4	5	5	2	1	2					20	6	13	13	15	11		
Ileocolitis (over 2 years).....												1				1									2		1	1	2				
Convulsions of Children.....		3	3	5	3	3	2	3	3	1	1		2	3	1	2	2		1		3	2	1	1	2	46	1	25	22	23	24		
Group (without membrane).....								2	2	1	2		1												8				4	4			
Cystitis.....		1	2					2						1											6	4		5	5	7	3		
Debility, Congenital (under months).....		7	2	8	3	1	5	3	3	7	3	1	3	2	4	4	4	2	3	7	8	6	5	6	3	100		40	60	54	46		
Asphyxia Neonatorum.....						1	1	1	1	1	1			1	1	1	1	2		1	1	1	1		13		8	5	6	7			
Difficult Labor.....				2	1	1	1	1	1	2		1	3	2	1			1	1	1	1	1	2		20		10	10	10	10			
Injury at Birth.....		1	1						1		1	1	1	1	1			1		3	1				12		4	8	8	4			
Premature Birth.....		8	5	8	5	9	8	7	8	6	4	5	12	3	13	5	10	5	2	17	5	4	1	8	6	164		80	84	85	79		
Diabetes.....				1	1		1	1	1	2		3		3	1	2	2	3	2	1		1	3	4	3	19	11	14	16	15	15		
Mellitus.....		1	2	3	5			3	3	1	8	1	1	3	1	2	3	2	1		1		2	2	28	17	26	19	18	27			
Diarrhoea (under 2 years).....				1							1	1	1	1	1	1	2	3	2		2				14	1	6	9	9	6			
Chronic.....				1																						1		1			1		
Diphtheria.....		7	5	5	3	7	7	7	2	3	8	2	6	11	8	4	3	6	5	7	10	7	6	10	11	139	11	62	88	76	74		
Membranous Croup.....		5	7		2	3		3	1	1	2		1	1	2	1	2	2	1			1	3	1	35	4	11	28	20	19			
Dysentery.....				2		3			1	2	2	3	1	9	11	21	14	8	8	4	1	2	2	1	1	75	21	38	58	55	41		
Eczema, General.....				1																					1		1		1		1		
Embolism, Arterial.....				1																					1		1		1		1		
Cerebral.....		1				2	1		1				1		1			1	2			3	1	1	10	3	9	4	6	7			
Pulmonary.....												1													1		1		1		1		

TABLE VII.—CAUSES OF DEATH, 1903.—(Continued.)

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		Am. For.		Am. For.		M. F.	
Gangrene, Senile.....																														
Gastritis.....	1	3	1	3	1	1	2	4	3	1	2	2	3	5	7	2	2	5	2	2	1	1	2	4	3	6	4	6	4	
Goitre, Exophthalmic.....	1	1																												
Heart Diseases*.....	17	24	15	15	11	13	31	8	10	16	15	10	14	12	16	14	13	10	6	16	16	13	12	9	161	175	122	214	176	160
Enlargement.....	1	1	1				1			1																				
Fatty Degeneration.....	4	1	2		4		1		1								1	3				1	2	1	4	1	3	2	3	2
Hypertrophy.....	1						2	1									1		1			1	1	2	5	5	5	5	7	3
Valvular Disease.....	11	6	9	10	9	9	8	11	7	14	5	9	10	6	13	14	7	8	4	11	9	15	12	140	95	117	118	123	112	
Mitral Stenosis.....																			1											
Hematemesis.....							1																							
Hemiplegia.....	1	1	2	1	2										1		2				1	2		1	9	6	8	7	8	7
Hemoptysis.....																														
Hemophilia.....																														
Hemorrhage, Cerebral.....	8	12	7	9	6	5	4	9	4	7	10	7	3	3	6	8	14	6	5	7	7	7	10	11	98	77	85	90	84	91
Hemorrhage of the New-born.....	2	1								2	1					1	1						3		11		9	2	6	5
Umbilical.....			1							1						1	1		1											
Uterine (cause unknown).....											1																			
Hepatitis.....	1	1																												
Hernia.....	4	1	1				1		1	1	1						1		1						7	1	4	4	6	2
Femoral.....							1									1		2	1	1		2	1	3	15	2	16	7	11	
Inguinal.....	1																								2	1	2	1		3
Umbilical.....											1								1											

*Not otherwise classified.

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.		
Hodgkin's Disease.....																									1	...			1	...		
Homicide.....	1	1	2	1			1																		6	3			6	3		
Hydrocele, Septic.....																									1	...			1	...		
Hydrocephalus.....	3		1		2											1									8	...			7	1		
Icterus, Neonatorum.....			1	1	3		2	2	1		2	3	1	2	1										23	...			13	10		
Indigestion (under 3 months).	2	1	4	1	1	2	3	1	1		1	3		3	2		1	1	2						34	...			14	20		
from Improper Feeding....	1	1	1	2	1	1	1	1		1	1	1		1	1		1	3	1						16	...			7	9		
Acute (over 3 months)....	3	2	2	6	1	4	2	7	2	4	4	5	4	2	1	4	9	2	4	3					77	11	36	52	56	32		
Influenza.....	1	8	14	19	25	36	10	8	4	3	2														99	43	68	74	61	81		
Insanity*.....			1		1				2				1	2	1	1	1	1	2						9	10	8	11	8	11		
Dementia.....	1		1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1						9	6	7	8	6	9		
Mania, Acute.....					1		1		2		1	2	1	1												5	8	5	8	5	8	
Mania, Chronic.....																									1	2		1	1	2	2	
Melancholia.....			1	1							1	1		1											3	4	2	5	3	4	4	
General Paralysis of Insane.			1	1	1	1	1	1			2	1	3		2	2	2	1	2						17	4	14	7	13	8		
Insomnia, Exhaustion.....																									...	1			1	1	...	
Intestinal Obstruction from Cicatricial Formations and Adhesions.....			1						1	1		1		1											4	4	3	5	4	4	4	
Fecal Impaction.....	1	1		1		1		1					2	1											9	2	7	4	7	4	4	
Intussusception.....	1	1	1	1	1	1	1	1	1	1	2	2		1	3	1									10	5	4	11	10	5	5	
Kidney Diseases*.....											1														1	1			1	1	...	1
Acute Bright's Disease....													1												1	1			1

* Not otherwise classified.

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Kidney Diseases, Chronic																															
Bright's Disease.....	13	8	9	7	11	4	8	9	9	4	6	4	7	8	5	8	9	3	5	7	6	8	5	6	111	58	87	82	93	76	
Acute Nephritis.....	2	2	3	2	2	..	3	3	6	3	5	2	2	3	1	2	4	2	3	2	4	4	2	4	42	24	20	46	37	29	
Chronic Nephritis.....	16	11	25	10	16	13	15	12	14	11	14	14	19	8	12	12	18	10	27	18	18	28	19	15	217	158	159	216	213	162	
Nephrelocosis.....																							1	..	1	..	1	..	1	..	
Pyelonephritis.....												1	1	..	..	..	..	..	..	..	..	..	1	4	..	3	1	2	2	2	
Laryngismus Stridulus.....	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	4	1	..	5	2	3	3	
Laryngitis.....	..	1	1	1	..	..	..	..	1	1	..	..	..	..	..	..	1	2	..	..	..	1	1	9	1	4	6	5	5	5	
Lead Poisoning (Saturnism) ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..
Leukemia.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	2	..	..	2	..
Liver Diseases*.....	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	1	1
Atrophy of, Acute Yellow..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	3	2	1	4	3	2	
Cirrhosis of.....	4	2	6	..	4	1	9	4	5	1	3	2	3	2	4	..	4	4	3	2	7	1	4	1	43	33	23	53	56	20	
Congestion of.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	..	2	..	2	..	2	..
Enlargement of.....	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	2	1	1	1	1
Hypertrophy of.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	..
Sclerosis of.....	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	2	1	..	..	..	2	2	2	2	3	1	1	..
Locomotor Ataxia.....	..	..	..	..	..	2	..	..	..	1	..	..	..	..	1	..	..	..	1	..	3	1	..	..	2	6	1	8	6	3	3
Malaria.....	1	..	1	1	2	..	..	..	1	..	2	1	2	2	2	2	3	..	3	..	1	..	..	12	7	5	14	8	11	11	11
Malaria Fever.....	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	2	1	..	1	1	1	1	1	3	7	2	8	4	6	6
Malassimilation (under 3 mos.)	2	3	2	2	3	2	2	..	..	3	2	4	7	3	4	7	3	6	4	1	3	1	2	..	62	..	26	36	35	27	27
Malassimilation (over 3 mos.)	1	..	1	..	..	2	1	..	..	..	..	1	1	2	..	1	1	2	1	1	2	1	1	16	..	8	8	9	7	7	
Malformations,* Congenital..	..	2	..	..	..	1	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	6	..	1	5	3	3	3	3

* Not otherwise classified.

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.		Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.			
		M.		F.		M.		F.		M.		F.		M.		F.		M.		F.		M.		F.		M.		F.		M.		F.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Osteomalacia.....																				1	...					1	...			1	...		
Otitis Media.....		2		1		4				2		1		2			1	4		1		1				18	2	8	12	17	3		
Ovarian Cyst.....								1				1													3	1	2	2			2	...	
Pancreatis.....				1					1																2	...					2	...	
Paralysis.....		1	1	1	2	3	1								2	2	5	2	1	2		8	2	1	17	17	16	18	9	25			
Acute, Ascending.....			1														1		1						3	...	3	...	3	...	3	...	
Agitans.....		1				1	1																		4	2	4	2		3	3	3	
Paraplegia.....							1																		1	...	1	...		1	...	1	
Paresis.....		1	1	2		1	1			1		1		1	1	1	1	1	1	2		3		1	9	10	8	11	13	6		6	
Parotitis (Mumps).....														1				1							3	...	2	1	2		2	1	
Pericarditis.....		2	1		1			1				1				2									7	1	3	5	4	4		4	
Peritonitis, Simple.....		2	1	2	1	1	2	1	1	1	1	1	1	1	1	2	2		1	1	1	1	1	14	9	6	17	9	14		14		
Pelvic (non puerperal).....																		1							1	...	1	...	1	...	1	...	
Pertussis (Whooping Cough).....		20	23	12	17	15	10	9	23	6	5	4	5	1	3	1					3	1	3	1	2	16	3	79	85	70	94		94
Phlebitis.....							1																		1	...	1	...		1	...	1	
Pleurisy.....			5	1	1	1	3	1	1					1	5	1		1	1	1	1	1	1	1	18	8	12	14	7	19		19	
Pneumonia.....		48	37	48	46	51	41	23	39	33	30	15	21	17	10	8	6	13	7	14	22	18	21	35	47	431	219	235	415	323	327		327
Broncho.....		8	27	18	19	15	11	8	11	10	11	9	6	7	4	3		3	2	6	7	4	8	11	12	168	52	66	154	102	118		118
Pott's Disease.....		1					2													1					3	2	3	2	5			5	
Prostate Disease.....		3	3			3		3	1		1					3		2	4	1					14	7	14	7	21			...	
Purpura Hemorrhagica.....				1				1								1									2	2	1	3		3	1		3
Pyæmia (from Suppurating Knee Joint).....								1																	1	...	1	...		1	...	1	...

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		Am. For.		Am. For.		M. F.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.
Spleen, Enlargement of.....					1												1							2	...	1	1	1	1	
Stomatitis.....																								1	2	...	1	1	2	
Stricture of Urethra.....					1												1							...	1	...	1	1	...	
Suicide, by Cutting Throat.....					1																			...	1	...	1	1	...	
by Drowning.....					1					1														1	4	1	4	3	2	
by Hanging.....	2				1					1	2					1	1							7	2	6	3	7	2	
by Illuminating Gas.....					2	1				2	1					1	1							5	7	5	7	10	2	
by Inhalation of Chloro- form.....					1																			1	...	1	...	1	...	
by Jumping from High Building.....												1												...	1	...	1	...	1	
by Shooting.....					1					2	1		5		1									6	4	4	6	10	...	
by Poison, Arsenic.....																						2		1	1	1	1	...	2	
Carbolic Acid.....	1	1			1					1														3	1	1	3	2	2	
Corrosive Sublimate.....																								1	...	1	...	1	...	
Cyanide Potassium.....																								1	...	...	1	1	...
Laudanum, or Morphine.....					1							1												3	...	2	1	3	...	
Paris Green.....					1												1	1						1	2	...	3	2	1	
Strychnine.....														1										1	...	1	...	1	...	
Unknown Poison..					1																			1	...	...	1	1	...
Synovitis of Elbow.....																								1	...	...	1	...	...
Syphilis.....	1	1			1																			3	4	...	1	...	...
Congenital.....		3										1	3	4		3	1	1						21	...	9	12	12	9	

TABLE VII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.	
Tabes Mesenterica.....													1												1				1	...	
Tetanus, Neonatorum.....												1		1					1					3		1	2	2	1	1	
Thrombosis, Arterial.....											1													2		2	...	1	1	1	
Cerebral.....																			1					1		1	...	1	...	1	
Tonsillitis.....																		1						1				1	...	1	
Tuberculosis, Pulmonary.....	36	34	41	29	46	33	46	34	39	38	28	32	34	34	31	36	35	33	35	32	34	32	34	34	504	336	241	599	439	401	
General.....	3	1	1	2	3	1	1	2	3	3	3	3	3	4	5	2	5	2	3	1	1	1	1	1	45	4	23	26	31	18	
Hip Joint.....																1								2	1		2	1	1	2	
Kidneys.....																							1		1		1	...	1	1	
Knee Joint.....											1													1		1	...	1	...	1	
Shoulder.....							1																							1	...
Tuberculous Adenitis.....	1							1		1															3		3	...	1	1	...
Enteritis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	11	3	7	7	8	6	6	
Laryngitis.....							2	1		1									1	1	...	2	1	3	6	2	7	5	4	4	
Meningitis.....	2	2	5	3	3	3	4	4	6	3	4	4	6	3	2	3	2	5	5	1	3	5	1	72	7	33	46	42	37	37	
Peritonitis.....	2	1	2			2	2	2	1				3		5				1	1	1	1	17	3	6	14	14	6	6	1	
Salpingitis.....	1																							...	1	...	1	...	1	1	
Tumor of Abdomen.....																		1						1	...	1	...	1	1	1	
Brain.....				1													1				2			3	1	1	3	4	...	1	
Cystic, of Breast.....							1																	1		1	...	1	...	1	
Cystic, of Liver.....	1																							...	1	...	1	...	1	...	
Typhoid Fever.....	4	5	1	1	2	4	4	2	6	3	3	1	5	6	4	3	4	5	7	2	3	3	4	54	32	27	59	47	39	39	
Ulcer of Stomach.....	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	3	4	4	4	4	4	4	

TABLE VII.—CAUSES OF DEATH, 1903.—Concluded.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		NATIVITY.		PARENT-AGE.		SEX.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	Am.	For.	M.	F.
Ulcers, Varicose (Septicemia)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	...	1	...	1	
Umbilicus, Inflammation of....	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	...	1	...	1	
Cause Unknown.....	1	2	2	1	..	1	2	2	2	..	..	1	1	2	1	2	4	1	2	1	1	1	25	5	10	20	16	14		

TABLE VIII.—CAUSES OF DEATH, 1903.—Continued.

Under 1.		1 and under 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Age not stated.	SEX.		TOTAL.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
CAUSES OF DEATH.																				
Erysipelas, Foot.																				2
Forearm.			1								1									1
Genitals.										1									1	1
Head.																				1
Erysipelas, Leg.											1									2
2	1																			2
Umbilicus.																				2
Phlegmonous.																				2
																				7
Fibroid of Uterus.																				13
Fistula in Ano.																				1
Gallstones (Cholelithiasis).																				9
Gangrene of Foot.																				2
Leg.																				3
																				9
Mouth.																				1
Scrotum.																				1
Senile.																				1
Gastritis.																				10
Goitre, Exophthalmic.																				4
Heart Diseases.*																				60
	7	4	2	2																33
Enlargement.																				3
Fatty Degeneration.																				3
Hypertrophy.																				5
Valvular Diseases.																				5
																				16
Mitral Stenosis.																				3
Hematemesis.																				1
Hemiplegia.																				1
Hemoptysis.																				15
Hemophilia.																				1
Hemorrhage, Cerebral.																				1
																				175

* Not otherwise classified.

TABLE VIII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	Age not stated.		SEX.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Hemorrhage of the Newborn.....	6	5																		6	5	11
Umbilical.....	5	2																		5	2	7
Uterine (Cause Unknown).....											1											1
Hepatitis.....			1	1								1			1	2				6	2	8
Hernia.....													2	2	2	3	1			7	10	17
Femoral.....																					3	3
Inguinal.....													1		2					3		3
Umbilical.....																					1	1
Hodgkin's Disease.....																						
Homicide.....	1														1					1		1
Hydrocele, Septic.....																						
Hydrocephalus.....	3	1	1																	6	3	9
Icterus Neonatorum.....	13	10				3										1				1		1
Indigestion (under 3 months).....	17	17																		13	10	23
From Improper Feeding.....	8	8																		17	17	34
Acute (over 3 months).....	33	16	9	4	1	2	1	2	1	1		1	1	1	2	1	3	1		56	32	88
Influenza.....	8	6	2	5	1	1		1	1	1		1	1	1	2	1	2	2		61	81	142
Insanity*.....																						
Dementia.....																						
Mania, Acute.....									1											8	11	19
Chronic.....																				6	9	15
Melancholia.....																				5	8	13
General Paralysis of Insane.....																					2	7
Insomnia Exhaustion.....																				3	4	7
Intestinal Obstruction from Ci-																				13	8	21
atricial formations and ad-																				1		1
hesions.....																						
Fecal Impaction.....	1	1																		4	4	8
																				7		7

* Not otherwise classified.

TABLE VIII.—CAUSES OF DEATH, 1903.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 4.		4 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		TOTAL.				
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.								
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				M.	F.		
Intestinal Intussusception.....	3	2													1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	5	15	
Kidney Diseases*.....																																							1	1	2
Acute Bright's Disease.....																																							93	76	169
Chronic Bright's Disease.....	1	3																																					37	29	66
Nephritis, Acute.....	4	2	3	1																																			213	162	375
Chronic.....	2		1	1	1	1	1	1	1	1	1	2	1	5	3	14	10	21	13	21	19	39	43	49	22	39	31	16	15	2	2							1	1	2	
Nephroleosis.....																																							2	2	4
Pyelonephritis.....																																							2	3	5
Pyelonephritis.....																																							1	1	2
Laryngitis.....	2	1	1	2																																			5	5	10
Lead Poisoning (Saturnism)....																																							1	1	2
Leukemia.....																																							1	1	2
Liver Diseases*.....																																							1	1	2
Atrophy of, Acute Yellow.....																																							3	2	5
Cirrhosis of.....																																							56	20	76
Congestion of.....																																							2	1	3
Enlargement of.....																																							1	1	2
Hypertrophy of.....																																							1	1	2
Sclerosis of.....																																							1	1	2
Locomotor Ataxia.....																																							1	1	2
Malaria.....	1	1	1	1	2																																		3	1	4
Malarial Fever.....																																							6	3	9
Malassimilation (under 3 mos.)..	35	27																																					8	11	19
(Over 3 months).....	9	7																																					4	6	10
Malformations, * Congenital....	3	3																																					35	27	62
Imperforate Anus.....	1	2																																					9	7	16
Foramen Ovale, Patent.....	23	14																																					3	3	6
Heart.....	6																																						23	14	37
																																							6		6

* Not otherwise classified.

[illegible]

1	1	1	3	4	2	1	12	1	1	27	18.	Erysipelas.....	.31	.24	.20	.31	.15	.59	.27	.84	.57	.18	.36	
							1	2	...	1	4	19.	Other Epidemic Diseases.....	.05	.24	.....	.05	.15	.....	.....	.....	.....	.....
(B. Other General Diseases.)																								
3	...	...	...	...	...	...	2	...	...	5	20.	20.	Purulent Infection and Septicæmia.....	.06	.....	.....	.05	.....	.....	.....	.....	.....	1.08	
			1	3	...	1	4	...	...	9	26.	26.	Tuberculosis of Larynx.....	.10	.....	.....	.10	.15	.....	.20	.28	.....	.....
23	39	10	37	156	32	71	386	62	24	840	27.	27.	Tuberculosis of Lungs.....	9.72	5.84	12.68	9.91	10.69	9.44	10.66	10.31	5.75	6.84	8.30
	3	1	2	16	1	2	50	4	...	79	28.	28.	Tuberculosis of the Meninges.....	.91	...	.82	1.28	.30	.29	1.09	.56	.57	.53	
	4	2	1	4	1	1	20	1	1	35	29.	29.	Abdominal Tuberculosis.....	.40	.24	.20	.51	.15	.29	.27	.28	1.15	.70	
			2	...	...	...	2	2	...	6	30.	30.	Pott's Disease.....	.07	...	.41	.05	.....	.....	.....	.56	.....	.....
1	...	...	...	...	1	...	4	...	...	5	32.	32.	White Swelling.....	.06	...	...	.10	.29	.....	.....	.....	.....	.....
			1	...	...	...	3	1	...	5	33.	33.	Tuberculosis of Other Organs.....	.06	...	.20	.08	.....	.07	.....	.....	.....	.....
4	...	...	1	3	...	2	35	2	2	49	34.	34.	General Tuberculosis.....	.57	.49	.41	.90	.30	...	.20	.28	...	1.44	
2	1	...	2	5	...	1	16	...	1	28	36.	36.	Syphilis.....	.32	.24	...	.41	.15	...	.34	.56	...	.72	
	2	...	...	4	...	...	7	...	...	13	39.	39.	Cancer and other Malignant Tumors of the Buccal Cavity.....	.15	.....	.....	.18	...	.27	.....	...	.35	...	
3	13	3	5	23	5	10	61	2	9	134	40.	40.	Cancer and other Malignant Tumors of Stomach and Liver.....	1.55	2.19	.41	1.57	1.51	1.47	1.57	1.39	1.72	2.28	1.08
	1	...	1	5	...	4	18	2	6	37	41.	41.	Cancer and other Malignant Tumors of the Peritoneum, Intestines, and Rectum.....	.43	1.46	.41	.46	.60	.....	.34	.28	...	.18	...
2	2	...	1	19	...	2	25	2	6	59	42.	42.	Cancer and other Malignant Tumors of the Female Genital Organs.....	.68	1.46	.41	.64	.30	...	1.30	.28	...	.35	.72
2	2	2	3	5	1	2	22	1	5	45	43.	43.	Cancer and other Malignant Tumors of the Breast.....	.52	1.22	.20	.56	.30	.29	.34	.84	1.15	.35	.72
1	...	...	...	5	...	2	3	...	2	13	44.	44.	Cancer and other Malignant Tumors of the Skin.....	.15	.49	...	.08	.30	...	.34	...	...	.36	...
3	1	3	5	14	1	1	18	...	3	49	45.	45.	Cancer and other Malignant Tumors of other Organs.....	.57	.73	...	.46	.15	.29	.96	1.39	1.72	.18	1.08
			...	...	1	...	...	...	...	1	46.	46.	Other Tumors (Tumors of the Female Genital Organs excepted).....	.01	.....	.....	...	...	.29	.....	.....	.....	.....	...
			1	2	5	3	18	1	1	31	47.	47.	Acute Articular Rheumatism.....	.36	.24	.20	.46	...	.88	.34	.56	.57	...	...
1	...	...	...	2	...	...	3	...	...	7	48.	48.	Chronic Rheumatism and Gout.....	.08	.24	...	.08	...	...	.14	...	...	.36	...
			...	...	...	...	1	...	...	1	49.	49.	Scurvy.....	.01	.....	...	.03	...	...	...	...	...	...	...
1	4	2	6	12	...	3	36	4	7	75	50.	50.	Diabetes.....	.87	1.70	.82	.92	.45	...	.82	1.67	.15	.70	.36

22	34	8	34	73	15	34	147	14	23	404	64	Congestion and Hemorrhage of Brain.....	4	68	5	60	2	86	3	77	5	12	4	42	4	99	9	47	4	60	5	96	7	94				
...	...	2	3	3	5	1	...	14	65	Softening of the Brain.....	20	13	20	...	84	1	15					
2	7	...	3	9	1	1	13	12	2	50	66	Paralysis without Specific Cause.....	...	...	...	...	...	58	49	2	45	33	15	29	...	61	...	84	...	1	23	72	
...	1	1	...	29	...	...	6	2	1	40	67	General Paralysis.....	...	...	...	...	...	46	24	41	15	...	...	...	...	1	98	...	...	57	18	...
...	2	...	...	49	2	1	1	...	1	56	68	Other Forms of Mental Alienation.....	...	...	...	...	...	65	24	...	...	...	...	...	...	3	35	...	...	...	35	...
...	2	1	2	14	...	2	10	1	1	33	69	Epilepsy.....	...	...	...	...	...	38	24	20	26	30	...	...	96	...	56	57	35	...	...					
2	4	1	...	6	2	7	19	4	2	47	71	Convulsions (under 5 years).....	...	...	...	...	...	54	49	82	48	1	05	59	...	41	...	...	57	70	72	
...	...	1	...	1	...	...	1	...	...	3	72	Tetanus.....	...	...	...	...	...	...	...	...	...	...	...	...	...	07	...	...	...	57	...	...				
1	2	3	...	3	1	...	8	...	1	19	74	Other Diseases of the Nervous System.....	...	...	...	...	...	22	24	...	...	...	29	...	20	...	...	1	72	35	36	
...	...	1	...	4	...	1	13	...	1	20	76	Diseases of the Ear.....	...	...	...	...	...	23	24	...	33	15	...	...	27	...	...	...	57	...	...					
III.																																						
DISEASES OF THE CIRCULATORY SYSTEM.																																						
...	...	1	...	1	3	1	...	1	...	1	8	77	Pericarditis.....	...	...	...	...	09	24	...	03	...	29	...	20	...	28	...	...	18	...	...				
3	1	...	4	13	1	4	44	1	2	73	78	Acute Endocarditis.....	...	...	...	...	...	84	49	20	1	13	60	29	89	1	11	...	18	1	08		
22	38	16	22	104	18	53	263	27	45	608	79	Organic Diseases of the Heart.....	7	04	10	95	5	52	6	75	7	98	5	31	6	13	9	20	6	66	7	94	
1	1	1	2	9	...	3	17	2	1	37	80	Angina Pectoris.....	...	...	...	...	...	43	24	41	44	45	...	...	...	61	...	56	57	18	36	
1	3	1	2	3	1	1	18	...	3	33	81	Diseases of the Arteries.....	...	...	...	...	...	38	73	...	46	15	29	...	20	...	56	57	53	36			
...	3	...	1	1	1	1	6	1	4	18	82	Embolism and Thrombosis.....	...	...	...	...	...	21	97	20	15	15	29	...	07	...	28	...	53	...	...					
...	...	...	...	...	...	...	...	1	...	1	2	83	Diseases of the Veins.....	...	...	...	...	02	24	...	03	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	1	4	...	...	6	85	Hemorrhages.....	...	...	...	...	...	07	...	...	10	15	...	...	...	...	...	...	...	18	...	...				
IV.																																						
DISEASES OF THE RESPIRATORY SYSTEM.																																						
1	7	...	...	1	...	...	8	...	6	...	23	88	Diseases of the Larynx.....	...	...	...	...	27	...	1	23	21	...	...	...	07	...	...	...	1	23	36
...	...	...	...	2	...	...	...	...	...	...	2	89	Diseases of the Thyroid Body.....	...	...	...	...	02	...	...	...	...	...	...	...	14	...	...	...	...	...	...
3	13	2	3	29	22	25	101	19	5	222	90	Acute Bronchitis.....	2	57	1	22	3	89	2	59	3	77	6	49	1	98	84	1	15	2	28	1	08

5	6	3	1	31	4	14	61	6	8	139	106.	Diarrhea and Enteritis (over 2 years)	1.61	1.95	1.23	1.56	2.11	1.18	2.12	.28	1.72	1.05	1.81
1	1	...	1	1	2	1	15	...	2	24	108-1.	Hernia.....	.28	.49	.....	.39	.15	.59	.07	.28	....	.18	.36
1	1	...	1	3	1	...	15	1	...	23	108-2.	Obstruction of the Intestines.....	.27	....	.20	.39	....	.29	.20	.28	....	.18	.36
...	1	1	...	3	...	1	7	1	...	14	109.	Other Diseases of the Intestines.....	.16	....	.20	.18	.15	....	.20	....	.57	.18	....
...	1	...	...	2	...	2	...	...	5	110.	Acute Yellow Atrophy of Liver .....	.06	....	....	....	.05	....	.59	....	....	....	.18	....
2	6	1	8	10	...	7	42	4	8	88	112.	Cirrhosis of Liver	1.02	1.95	.82	1.08	1.05	....	.68	2.23	.57	1.05	.72
...	...	...	...	5	...	1	4	...	2	113.	Biliary Calculi .....	.14	.49	....	....	.10	.15	....	.34	....	....	....	....
...	1	...	2	2	1	1	8	...	15	114.	Other Diseases of the Liver .....	.17	....	....	.21	.15	.29	.14	.56	....	.18	....	....
...	...	...	...	...	...	...	...	2	1	3	115.	Diseases of the Spleen.....	.03	.24	....	.05	....	....	....	....	....	....	....
1	3	1	...	5	...	4	4	3	3	24	116.	Simple Peritonitis (non-puerperal) .....	.28	.73	.61	.10	.60	....	.34	....	.57	.53	.36
...	...	...	2	...	...	...	1	...	3	117.	Other Diseases of the Digestive System .....	.03	....	....	.03	....	....	....	....	.56	....	....	....
4	1	...	4	4	1	4	39	2	4	63	118.	Appendicitis. ....	.73	.97	.41	1.00	.60	.29	.27	1.11	....	.18	1.44

VI.

DISEASES OF THE GENITO-URINARY SYSTEM AND ITS ADNEXA.

5	2	1	7	8	3	12	28	...	1	67	119.	Acute Nephritis.....	.78	.24	.....	.72	1.81	.88	.55	1.95	.57	.35	1.81
9	36	9	22	89	17	45	255	25	27	544	120.	Brighr's Disease.....	6.30	6.57	5.11	6.55	6.78	5.01	6.08	6.13	5.17	6.32	6.86
.	1	.....	.....	.....	.....	.....	4	...	1	6	121.	Other Diseases of the Kidneys and their Adnexa...	.07	.24	.....	.10	.....	.....	.....	.....	.....	.18	.....
.	.....	.....	.....	.....	1	.....	1	.....	2	122.	Calculi of the Urinary Tract.....	.02	.....	.....	.....	.03	.....	.29	.....	.....	.....	.....	.....
1	1	.....	1	2	.....	3	.....	3	2	10	123.	Diseases of the Bladder.....	.12	.49	.....	.08	.....	.....	.14	.28	.....	.18	.36
.....	.....	.....	.....	.....	.....	.....	1	.....	1	124.	Diseases of the Urethra.....	.01	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	1	2	1	1	14	1	1	21	125.	Diseases of the Prostate.....	.24	.24	.20	.36	.15	.29	.14	.28	.....	.....	.....
1	.....	.....	.....	.....	.....	.....	.....	.....	1	126.	Non-venereal Diseases of the Male Genital Organs...	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.36	.....
.....	.....	.....	.....	.....	.....	.....	2	.....	2	127.	Metritis.....	.02	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	1	.....	.....	.....	.....	.....	1	128.	Uterine Hemorrhage (non-puerperal).....	.01	.....	.....	.....	.....	.....	.....	.28	.....	.....	.....	.....
1	1	.....	.....	1	.....	.....	9	1	1	13	129.	Uterine Tumor (non-cancerous)	.15	.....	.20	.23	.....	.07	.....	.....	.....	.18	.36

VIII.																							
DISEASES OF THE SKIN AND CELLULAR TISSUE.																							
...	1	1	6	...	1	10	1	3	24	142.	Gangrene.....	.27	.73	.20	.26	.1541	.28	.57	.18	
...	1	...	1	2	...	4	143.	Carbuncle.....05050718	
8	1	...	1	...	1	2	1	...	6	144.	Acute Abscess, Phlegmon.....	.0703	.30	.292818	
IX.																							
DISEASES OF THE ORGANS OF LOCOMOTION.																							
...	3	...	1	4	1	...	7	...	1	17	146.	Non-tuberculous Diseases of the Bones.....	.20	.241829	.27	.2853
...	1	...	1	147.	Arthritis and other Diseases of the Joints.....	.0103
X.																							
MALFORMATION.																							
...	2	2	1	2	1	...	8	150-1.	Hydrocephalus.....	.0903	.30	.29	.1435	
...	2	...	1	7	...	7	21	3	2	43	150-2.	Cyanosis.....	.50	.49	.61	.54	1.0548	.2835
2	1	...	1	3	...	2	7	2	1	19	150-3.	Other Congenital Malformations.....	.22	.24	.41	.18	.3020	.2818	.72
XI.																							
EARLY INFANCY.																							
1	14	6	3	16	7	17	84	11	5	164	151-1.	Premature Birth.....	1.90	1.22	2.25	2.16	2.56	2.06	1.09	.84	3.45	2.46	.36
5	15	7	11	16	9	19	105	30	11	228	151-2	Congenital Debility.....	2.64	2.68	6.14	2.70	2.86	2.65	1.09	3.06	4.02	2.63	1.81
...	3	1	2	5	3	1	16	...	1	32	152.	Other Diseases of Early Infancy.....	.37	.2441	.15	.88	.34	.56	.57	.53
...	5	3	2	6	...	16	153.	Lack of Care.....	.191556	1.72	.88
XII.																							
OLD AGE.																							
14	21	7	29	56	7	20	51	9	17	231	154.	...	2.68	4.14	1.84	1.31	3.01	2.07	3.82	8.08	4.02	3.68	5.05
XIII.																							
EXTERNAL CAUSES.																							
1	...	1	1	5	1	...	6	...	1	16	155.	Suicide by Poison.....	.19	.241529	.34	.28	.5736

3	1	1	1	1	1	1	1	1	1	5	171.	Electric Shock.....	.06	..	..	.03	..	..	..	..	..	.53
8	9	2	4	16	3	3	13	4	10	72	172.	Accidental Drowning.....	.83	2.43	.82	.33	.45	.88	1.09	1.11	1.15	2.89
				1	..	..	20	..	..	21	174.	Absorption of Deleterious Cases (non-suicidal).....	.24	..	..	.51	..	..	..	..	..
1	1	1	..	..	2	2	1	1	..	9	175.	Other Acute Poisonings.....	.10	..	.20	.03	.30	.59	..	..	.57	.18
	2	1	..	2	..	..	4	1	..	10	176-1.	Other External Violence (suffocation).....	.12	..	.20	.10	..	..	.14	..	.57	.35
3	1	..	4	3	..	..	21	..	..	32	176-2.	Injuries at Birth.....	.37	..	..	.54	..	.88	.27	..	.57	1.08
1	1	1	..	1	..	..	6	..	..	9	176-3	Homicide.....	.10	..	..	.15	..	..	.07	..	.57	.18
XIV																						
ILL-DEFINED DISEASES.																						
1	..	1	3	6	1	1	29	1	3	46	179.	Unspecified or ill-defined Causes of Death.....	.53	.73	.20	.74	.15	.29	.41	.84	.57	.36

TABLE X.—*According to International Classification.*

CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
I.							
GENERAL DISEASES.....	592	902	748	836	935	1,115	926
II.							
DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.....	130	161	182	185	221	223	217
III.							
DISEASES OF THE CIRCULATORY SYSTEM.....	29	40	66	44	71	72	65
IV.							
DISEASES OF THE RESPIRATORY SYSTEM.....	94	116	151	213	234	267	219
V.							
DISEASES OF THE DIGESTIVE SYSTEM.....	79	137	205	178	194	238	203
VI.							
DISEASES OF THE GENITO-URINARY SYSTEM AND ITS AD- NEXA.....	10	8	13	12	25	21	20
VII.							
PUERPERAL STATE.....	12	9	15	24	21	31	25
VIII.							
DISEASES OF THE SKIN AND CELLULAR TISSUE.....	7	5	12	12	17	12	6
IX.							
DISEASES OF THE ORGANS OF LOCOMOTION.....	3	1	2	7	6	6	9
X.							
MALFORMATIONS.....	3	7	11	5	12	14	14
XI.							
EARLY INFANCY.....	10	34	63	33	52	62	56
XII.							
OLD AGE.....	58	67	84	76	119	114	117
XIII.							
EXTERNAL CAUSES.....	63	56	74	61	82	87	89
XIV.							
ILL-DEFINED DISEASES.....	160	185	220	356	336	354	304
TOTAL NUMBER OF DEATHS.....	1,250	1,728	1,846	2,042	2,325	2,616	2,270

TABLE X.—*International Classification.*—Continued.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
1,067	1,255	1,042	1,467	1,480	1,655	1,259	1,101	1,065	1,433	1,278	1,199	1,404	1,635	1,635	1,482	1,504	1,874	1,888
245	287	231	282	296	286	294	320	277	320	342	379	446	512	434	454	444	471	492
76	112	115	103	128	99	117	116	117	130	123	148	190	193	220	192	173	192	173
272	282	251	314	341	302	292	264	265	280	288	341	379	390	414	591	530	417	523
336	287	285	277	351	316	275	285	292	301	383	347	628	508	505	549	476	513	395
22	28	24	34	23	24	24	43	37	40	41	52	75	80	83	75	66	93	89
22	26	27	35	37	31	31	34	34	37	44	52	45	46	60	53	48	46	43
21	29	16	17	18	21	21	29	21	14	19	28	24	30	29	29	35	23	30
5	15	8	9	7	5	5	6	12	11	15	5	11	18	15	16	27	15	10
15	13	11	13	8	10	12	17	16	15	14	15	17	15	17	15	11	26	23
73	85	76	81	74	93	77	90	70	58	91	73	131	219	196	155	97	94	88
116	132	143	161	193	152	178	188	206	217	204	232	233	254	223	216	241	213	222
135	108	107	125	116	103	132	122	115	122	139	125	146	156	150	171	153	162	159
281	268	255	289	288	308	253	274	385	404	257	348	518	347	248	319	311	311	297
2,686	2,927	2,591	3,207	3,360	3,405	2,970	2,889	2,912	3,382	3,238	3,344	4,247	4,403	4,229	4,317	4,116	4,450	4,441

TABLE X.—*International Classification.*—Continued.

CAUSES OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.
I.									
GENERAL DISEASES.....	1,830	1,879	1,829	1,729	1,809	1,800	1,851	2,056	2,301
II.									
DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.....	534	571	609	630	660	671	658	737	803
III.									
DISEASES OF THE CIRCULATORY SYSTEM.....	209	243	274	256	336	294	361	336	414
IV.									
DISEASES OF THE RESPIRATORY SYSTEM.....	514	574	565	558	648	597	764	786	833
V.									
DISEASES OF THE DIGESTIVE SYSTEM.....	381	487	508	672	608	690	613	790	804
VI.									
DISEASES OF THE GENITO-URINARY SYSTEM AND ITS ADNEXA.....	98	111	97	111	184	167	208	210	212
VII.									
PUERPERAL STATE.....	45	51	60	50	60	51	47	41	54
VIII.									
DISEASES OF THE SKIN AND CELLULAR TISSUE....	32	18	39	24	32	46	43	30	38
IX.									
DISEASES OF THE ORGANS OF LOCOMOTION.....	20	15	11	25	26	32	34	26	23
X.									
MALFORMATIONS.....	19	13	26	21	19	22	15	15	18
XI.									
EARLY INFANCY.....	91	121	120	134	184	154	167	194	245
XII.									
OLD AGE.....	220	273	247	283	275	293	267	276	278
XIII.									
EXTERNAL CAUSES.....	127	157	182	215	185	221	201	213	224
XIV.									
ILL-DEFINED DISEASES.....	352	316	449	366	256	103	160	139	93
TOTAL NUMBER OF DEATHS.....	4,472	4,829	5,016	5,074	5,282	5,141	5,389	5,849	6,340

TABLE X.—*International Classification.*—Continued.

1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	TOTAL AND PER- CENTAGE FOR 50 YEARS, 1853-1902.	
2,288	2,097	2,420	2,153	2,373	2,280	2,166	2,237	2,093	2,035	1,820	2,117	2,578	2,118	2,121	2,553	82,757	34.74
827	706	789	763	846	883	924	941	891	935	902	857	928	910	888	830	26,994	11.33
449	474	419	489	510	540	481	538	560	571	554	656	715	720	750	785	14,253	5.98
869	885	991	945	1,120	1,214	1,028	1,068	1,040	929	825	990	1,343	1,058	1,040	1,205	29,214	12.26
880	871	1,020	976	1,126	1,156	1,035	1,098	1,191	1,038	1,234	1,243	1,423	1,365	1,124	1,216	30,876	12.96
241	250	281	289	303	357	391	434	484	461	542	564	593	591	629	682	8,870	3.72
51	44	45	35	77	57	72	55	54	60	71	55	99	95	72	60	2,289	.96
45	36	48	31	35	25	43	20	38	20	35	12	25	28	19	63	1,287	.54
15	18	25	20	17	14	19	23	22	18	12	18	9	7	14	18	712	.30
20	19	25	28	16	24	23	32	32	30	35	46	47	57	79	70	1,039	.44
281	250	266	326	282	277	439	417	418	412	283	315	333	333	482	440	8,755	3.68
290	227	198	185	256	183	187	282	293	253	205	228	268	234	261	202	10,321	4.33
216	243	271	273	331	287	288	330	336	315	354	331	429	408	417	472	9,612	4.03
122	139	136	107	104	143	64	60	52	33	33	26	33	42	59	46	11,263	4.73
6,594	6,259	6,934	6,620	7,396	7,440	7,160	7,535	7,504	7,110	6,905	7,458	8,823	7,966	7,955	8,642	238,242	100.00

TABLE X.—*International Classification.*—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
	I.							
	GENERAL DISEASES.							
1	Typhoid Fever.....	25	39	63	53	76	42	70
4	Intermittent Fever and Malarial Cachexia.....	1		2	4	1	4	1
5	Smallpox.....	14	11	5	9			5
6	Measles.....		15	3	2	6	75	3
7	Scarlet Fever.....	108	46	71	208	147	234	71
8	Whooping Cough.....	2	14	4	19	9	13	46
9	Membranous Croup.....							
9a	Diphtheria.....						6	20
10	Grippe (Influenza).....	2	1	4		15	6	2
12	Cholera, Asiatic.....		176					
13	Cholera Nostras (Cholera Morbus).....	15	15	7	7	3	2	6
14	Dysentery.....	88	118	71	51	65	61	53
16	Yellow Fever.....					1		
18	Erysipelas.....	3	8	15	12	14	20	15
19	Other Epidemic Diseases.....						1	
20	Purulent Infection and Septicæmia.....							
21	Glanders and Farcy.....							
22	Malignant Pustule and Charbon (Anthrax).....			1			1	6
23	Rabies.....	1			1			1
26	Tubercle of Larynx.....							
27	Tubercle of Lungs.....	243	349	345	305	400	426	436
28	Tubercle of Meninges.....	33	40	58	47	52	65	56
29	Tubercle, Abdominal.....					4	6	2
30	Pott's Disease.....							
31	Abscess, Cold and by Congestion.....							
32	White Swelling.....							
33	Tubercle of Other Organs.....							
34	Tubercle, Generalized.....			1				
35	Scrofula.....	6	5	8	7	11	11	8
36	Syphilis.....	1		1	2		3	5
37	Blennorrhagia of the Adult.....							
39	Cancer of the Buccal Cavity.....			1		1		
40	Cancer of Stomach and Liver.....		3	5	4	9	10	
41	Cancer of the Peritoneum, Intestines, and Rectum.....							3
42	Cancer of the Genital Organs of the Female.....	2	1	3	5	4	3	
43	Cancer of Breast.....		1	2	1	4	6	
44	Cancer of the Skin.....			1	1			
45	Cancer of organs not specified.....	11	13	15	15	19	22	43
46	Other Tumors (Tumors of Female Genital Organs excepted).....							
47	Rheumatism, Acute Articular.....							
48	Rheumatism, Chronic, and Gout.....	2	1	2	4	7	4	7
49	Scorbutus (Scurvy).....							
50	Diabetes.....	1		3	3	3	3	3
51	Goitre, Exophthalmic.....							
52	Addison's Disease.....							
53	Leukemia.....							
54	Anemia and Chlorosis.....	2	7	4	5	6	12	2
55	Other General Diseases.....	18	28	47	58	53	55	43
56	Alcoholism, Acute and Chronic.....	14	10	7	13	25	21	22
57	Saturnism (Lead Poisoning).....							
59	Other Chronic Poisonings.....							
	II.							
	DISEASES OF THE NERVOUS SYSTEM AND THE ORGANS OF SPECIAL SENSE.							
60	Encephalitis.....	28	19	26	19	25	42	20
61	Meningitis, Simple.....							
61a	Meningitis, Epidemic Cerebro-Spinal.....							
62	Locomotor Ataxia, Progressive.....							
63	Other Diseases of the Spinal Cord.....							
64	Cerebral Congestion and Hemorrhage.....	22	25	33	39	42	43	51
65	Cerebral Softening.....							
66	Paralysis, without specified cause.....	21	6	20	9	21	21	28
67	Paralysis, General.....							
68	Other forms of Mental Alienation.....	4	6	8	14	16	14	16
69	Epilepsy.....	4		8	6	8	9	6
71	Convulsions of Children.....	29	68	53	64	57	57	50
72	Tetanus.....		3	3	4	6	1	3
73	Chorea.....					1		2
74a	Neuralgia.....							
74b	Other Diseases of the Nervous System.....	31	34	31	30	45	36	41
75	Diseases of the Eye and its Adnexa.....							
76	Diseases of the Ear.....							

TABLE X.—*International Classification.*—Continued.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
67 1 9 8 64 46	94 3 5 11 57 45	84 6 12 47 15	128 6 36 91 24	116 1 26 266 31	233 1 22 16 255 56	152 2 15 28	126 1 12 14 12	86 1 20 93 26	106 3 19 286 48	157 2 26 66 39	130 1 12 6 24 25	190 1 25 63 287 27	172 1 28 7 462 32	121 8 7 185 45	150 4 2 80 31	123 1 4 62 48	123 1 11 86 32	136 1 81 86 54
67 2	140 3	81 3	155 6	160 5	82 1	64 1	31 1	20 2	33 3	33 3	57 1	48 1	45 1	59 2	38 6	159 3	492 1	435 1
7 49	12 96	6 52	9 262	9 110	14 188	25 148	8 118	10 52	11 74	11 55	13 43	18 83	13 36	8 38	8 36	13 50	20 52	6 40
26 1	14 1	11 1	14 1	28 2	21 1	16 1	25 1	25 1	14 1	21 1	18 1	23 1	39 1	26 3	21 1	18 2	21 1	17 3
			3 1			1 1			2 1	1 1		1 1	1 1	1 1	1 1	2 2	1 2	3 3
505 52 1	523 63 3	513 50 3	512 47 3	498 49 3	547 63 7	526 56 2	563 41 2	517 57 2	555 76 10	577 51 4	535 71 5	600 44 5	584 52 7	536 51 3	637 57 4	660 68 5	665 55 10	685 70 6
9 2	14 5	14 3	13 2	14 5	6 2	4 5	10 5	9 3	18 11	16 19	24 22	23 9	18 20	21 3	8 20	18 18	25 11	27 13
11 1	12 3						7 8	5 5	10 10	11 11	15 15	11 11	21 21	17 17	12 12	18 18	25 25	15 15
3 5 1	14 4 1						9 8	11 5	12 7	6 4	8 7	7 10	12 16	12 6	11 14	13 11	19 19	18 11
23	24	61	62	61	55	40	34	36	46	54	38	58	65	52	58	64	70	75
16 8	6 8	4 2	7 4	7 6	8 6	10 6	7 1	11 11	17 6	17 8	13 5	21 7	17 8	22 5	26 11	14 5	24 9	16 4
5 52 26	3 62 30	4 47 22	12 40 32	4 42 27	3 47 10	3 42 7	2 41 10	4 41 10	4 52 18	2 56 17	6 58 17	4 69 23	3 84 14	2 79 22	4 90 17	3 78 21	1 89 12	2 64 15
41	43	36	54	49	39	46	52	40	54	42	44	57	65 44 62	23 37 16	28 38 13	76 4 7	78 3 8	78 3 11
51	57	43	62	54	55	56	72	57	69	64	77	58	67	70	67	95	109	102
32	40	36	31	42	45	36	52	54	48	66	79	67	67	86	90	70	72	86
11 4 70 5	13 11 5	7 6 5	10 6 8	15 3 73	20 7 73	13 4 6	14 12 3	13 5 63	14 5 79	18 4 85	16 10 5	26 13 116	19 15 97	13 16 98	32 20 100	19 12 89	12 19 53	22 8 112
31	48	42	40	54	36	52	43	38	48	55	51	78	74	67	52	70	81	62

TABLE X.—*International Classification.*—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
I.									
GENERAL DISEASES.									
1	Typhoid Fever.....	101	141	117	214	239	128	105	121
4	Intermittent Fever and Malarial Cachexia.....	2	3	10	8	21	29	34	43
5	Smallpox.....			3	2	2			
6	Measles.....		9	37	6	14	18	45	18
7	Scarlet Fever.....	311	468	138	45	34	97	91	88
8	Whooping Cough.....	43	20	68	71	9	43	42	49
9	Membranous Croup.....								
9a	Diphtheria.....	259	152	216	101	95	119	99	228
10	Grippe (Influenza).....	4		3	1		2	2	7
12	Cholera, Asiatic.....				1				
13	Cholera Nostras (Cholera Morbus).....	8	11	18	23	26	17	24	17
14	Dysentery.....	44	28	42	68	54	40	36	66
16	Yellow Fever.....		1						
18	Erysipelas.....	25	17	37	30	28	25	36	31
19	Other Epidemic Diseases.....	1				3			
20	Purulent Infection and Septicæmia.....	2		1		3	13	10	10
21	Glanders and Farcy.....								
22	Malignant Pustule and Charbon (Anthrax).....			1	1		3	1	
23	Rabies.....								
26	Tubercle of Larynx.....								
27	Tubercle of Lungs.....	645	652	712	744	766	739	783	827
28	Tubercle of Meninges.....	57	46	56	49	54	56	47	54
29	Tubercle, Abdominal.....	3	3	8	4	5	15	7	19
30	Pott's Disease.....								
31	Abscess, Cold and by Congestion.....								
32	White Swelling.....								
33	Tubercle of Other Organs.....								
34	Tubercle, Generalized.....	36	12	39	27	29	36	43	41
35	Scrofula.....	13	12	15	14	22	20	18	23
36	Syphilis.....	10	10	4	16	18	14	7	12
37	Blennorrhagia of the Adult.....			2				1	1
39	Cancer of the Buccal Cavity.....					2			
40	Cancer of Stomach and Liver.....	24	18	27	20	41	22	53	48
41	Cancer of the Peritoneum, Intestines, and Rectum.....					12		1	5
42	Cancer of the Genital Organs of the Female.....	21	21	22	14	28	22	26	23
43	Cancer of Breast.....	10	8	16	13	21	18	24	14
44	Cancer of the Skin.....					4		3	
45	Cancer of organs not specified.....	70	78	80	85	61	94	86	69
46	Other Tumors (Tumors of Female Genital Organs excepted).....								
47	Rheumatism, Acute Articular.....					23			
48	Rheumatism, Chronic, and Gout.....	24	24	29	21	4	35	34	35
49	Scorbutus (Scurvy).....								
50	Diabetes.....	15	15	16	13	15	25	21	24
51	Goitre, Exophthalmic.....								
52	Addison's Disease.....								
53	Leukemia.....								
54	Anemia and Chlorosis.....	8	8	4	4	7	7	6	15
55	Other General Diseases.....	79	107	84	107	140	133	144	156
56	Alcoholism, Acute and Chronic.....	15	15	24	27	29	30	22	12
57	Saturism (Lead Poisoning).....								
59	Other Chronic Poisonings.....								
II.									
DISEASES OF THE NERVOUS SYSTEM AND THE ORGANS OF SPECIAL SENSE.									
60	Encephalitis.....	73	85	100	87	83	68	81	11
61	Meningitis, Simple.....	6	3	7	8	8	10	13	93
61a	Meningitis, Epidemic Cerebro-Spinal.....	10	20	18	28	26	21	16	10
62	Locomotor Ataxia, Progressive.....								
63	Other Diseases of the Spinal Cord.....								
64	Cerebral Congestion and Hemorrhage.....	137	119	146	154	157	182	185	230
65	Cerebral Softening.....								
66	Paralysis, without Specified cause.....	83	96	101	111	118	116	104	107
67	Paralysis, General.....								
68	Other forms of Mental Alienation.....	17	19	32	23	29	36	35	49
69	Epilepsy.....	13	14	13	14	18	11	23	14
71	Convulsions of Children.....	104	133	102	110	126	139	111	121
72	Tetanus.....	6	3	8	8	8	5	4	8
73	Chorea.....		3			1			2
74a	Neuralgia.....								
74b	Other Diseases of the Nervous System.....	85	76	82	87	86	83	86	92
75	Diseases of the Eye and its Adnexa.....								
76	Diseases of the Ear.....								

TABLE X.—*International Classification.*—Continued.

Bertillon Numbers.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
	III.							
	DISEASES OF THE CIRCULATORY SYSTEM.							
77	Pericarditis.....		2	1	1	2		1
78	Endocarditis.....							
79	Organic Diseases of the Heart.....	28	38	61	41	63	66	61
80	Angina Pectoris.....			2		2		
81	Diseases of the Arteries (Atheroma, Aneurism, etc.).....	1		1	1		1	1
82	Embolism and Thrombosis.....							
83	Diseases of the Veins (Varices, Hemorrhoids, Phlebitis).....							
84	Diseases of the Lymphatic System (Lymphangitis, etc.).....							
85	Hemorrhages.....			1	1	4	5	1
	IV.							
	DISEASES OF THE RESPIRATORY SYSTEM.							
87	Diseases of the Nasal Fossæ.....							
88	Diseases of the Larynx.....	29	44	49	67	72	74	62
89	Diseases of the Thyroid Body.....							
90	Bronchitis, Acute.....	2	3	4	5	7	13	9
91	Bronchitis, Chronic.....							
93	Pneumonia.....	48	54	79	120	141	166	125
94	Pleurisy.....	7	10	12	13	10	12	18
95	Pulmonary Congestion and Apoplexy.....							
96	Gangrene of Lung.....							
97	Asthma.....	1	2	2	3	2	2	2
98	Pulmonary Emphysema.....							
99	Other Diseases of the Respiratory System.....	7	3	5	5	2		3
	V.							
	DISEASES OF THE DIGESTIVE SYSTEM.							
100	Diseases of the Mouth and its Adnexa.....	1	4	5	1	3	9	3
101	Diseases of the Pharynx.....							
102	Diseases of the Esophagus.....							
103	Ulcer of the Stomach.....							
104	Other Diseases of the Stomach (Cancer excepted).....	5	8	7	19	16	9	12
105	Diarrhea and Enteritis (under two years).....	39	68	91	77	70	93	61
105a	Diarrhea and Enteritis, Chronic.....							
106	Diarrhea and Enteritis (two years and over).....	16	35	64	47	65	65	70
107	Parasites, Intestinal.....		1	1		1	1	2
108	Hernias and Intestinal Obstructions.....	1	2	2			5	2
109	Other Diseases of the Intestines.....	4	4	4		4	4	5
109a	Diseases of the Anus and Fecal Fistulas.....						1	
110	Acute Yellow Atrophy of Liver.....							
112	Cirrhosis of the Liver.....							
113	Biliary Calculi.....							
114	Other Diseases of the Liver.....	7	8	8	7	21	35	29
115	Diseases of the Spleen.....		2					
116	Peritonitis, Simple (Puerperal excepted).....	4	2	13	17	5	10	13
117	Other Diseases of the Digestive System (Cancer and Tubercle excepted).....							
118	Appendicitis and Abscess of the Iliac Fossa.....	2	3	10	10	9	6	6
	VI.							
	DISEASES OF THE GENITO-URINARY SYSTEM AND ITS ADNEXA.							
119	Nephritis Acute.....							3
120	Bright's Disease.....	1						12
121	Other Diseases of the Kidneys and their Adnexa.....	1	1	7	5	15	8	
122	Calculi of the Urinary Tract.....		1				2	1
123	Diseases of the Bladder.....	3	1	3	2	3	2	4
124	Diseases of the Urethra, Urinary Abscess, etc.....							
125	Diseases of the Prostate.....		1			5	2	
126	Non-Veneral Diseases of the Male Genital Organs.....							
129	Tumor, Uterine, Non-Cancerous.....							
130	Other Diseases of the Uterus.....	5	4	1	2	2	3	
131	Cysts and other Tumors of the Ovary.....			2	3		4	
132	Other Diseases of the Female Genital Organs.....							
133	Non-puerperal Diseases of the Breast.....							

TABLE X.—*International Classification.*—Continued.

Bertillon Numbers.	CAUSES OF DEATH	1879	1880.	1881.	1882.	1883.	1884.	1885.	1886
III									
DISEASES OF THE CIRCULATORY SYSTEM.									
77	Pericarditis					17		10	21
78	Endocarditis								
79	Organic Diseases of the Heart	202	231	264	245	308	290	339	297
80	Angina Pectoris							5	9
81	Diseases of the Arteries (Atheroma, Aneurism, etc.)	1	2	2	2	8	3	4	2
82	Embolism and Thrombosis	3	4	5	5				3
83	Diseases of the Veins (Varices, Hemorrhoids, Phlebitis)	2							
84	Diseases of the Lymphatic System (Lymphangitis, etc.)								1
85	Hemorrhages	1	6	3	4	3	1	3	3
IV									
DISEASES OF THE RESPIRATORY SYSTEM.									
87	Diseases of the Nasal Fossæ								
88	Diseases of the Larynx	98	74	107	84	76	91	103	99
89	Diseases of the Thyroid Body								
90	Bronchitis, Acute	67	94	86	101	29	81	113	143
91	Bronchitis, Chronic					82	37	55	31
93	Pneumonia	311	364	327	344	400	363	465	481
94	Pleurisy	13	17	9	8	13	5	7	12
95	Pulmonary Congestion and Apoplexy								
96	Gangrene of Lung								
97	Asthma	13	11	16	9	13	10	21	13
98	Pulmonary Emphysema					1			2
99	Other Diseases of the Respiratory System	12	14	20	12	34	10		5
V.									
DISEASES OF THE DIGESTIVE SYSTEM.									
100	Diseases of the Mouth and its Adnexa	1		1	2	2	2		2
101	Diseases of the Pharynx		1	2			1	1	1
102	Diseases of the Esophagus								
103	Ulcer of the Stomach								
104	Other Diseases of the Stomach (Cancer excepted)	30	28	39	44	51	43	51	59
105	Diarrhœa and Enteritis (under two years)	175	255	254	354	267	367	308	421
105a	Diarrhœa and Enteritis, Chronic								
106	Diarrhœa and Enteritis (two years and over)	73	95	107	146	155	149	115	135
107	Parasites, Intestinal	1		1					
108	Hernias and Intestinal Obstructions	14	8	15	16	10	16	14	16
109	Other Diseases of the Intestines	2	9	6	6	21	7	10	11
109a	Diseases of the Anus and Fecal Fistulas								1
110	Acute Yellow Atrophy of Liver								
112	Cirrhosis of the Liver					15		5	16
113	Biliary Calculi			1	4	1		1	
114	Other Disease of the Liver	52	58	45	62	35	55	56	55
115	Diseases of the Spleen						2		1
116	Peritonitis, Simple (Puerperal excepted)	24	24	27	30	40	40	35	59
117	Other Diseases of the Digestive System (Cancer and Tubercle excepted)								
118	Appendicitis and Abscess of the Iliac Fossa	9	9	10	8	11	8	17	13
VI.									
DISEASES OF THE GENITO-URINARY SYSTEM AND ITS ADNEXA.									
119	Nephritis, Acute								
120	Bright's Disease	61	56	54	44	93	90	143	140
121	Other Diseases of the Kidneys and their Adnexa	20	35	25	44	38	39	25	24
122	Calculi of the Urinary Tract	1		1				1	
123	Diseases of the Bladder	12	9	11	14	19	17	20	25
124	Diseases of the Urethra, Urinary Abscess, etc.			2			3	1	1
125	Diseases of the Prostate	4	4	1	3	7	4	4	8
126	Non-Venereal Diseases of the Male Genital Organs								
129	Tumor, Uterine, Non-Cancerous							4	3
130	Other Diseases of the Uterus		7	3	6	20	2	2	1
131	Cysts and Other Tumors of the Ovary					6	12	8	8
132	Other Diseases of the Female Genital Organs								
133	Non-puerperal Diseases of the Breast								

TABLE X.—*International Classification.*—Continued.

1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	TOTAL AND PER- CENTAGE FOR 50 YEARS 1853-1902.	
29	23	29	27	33	19	8	10	8	12	13	8	14	8	17	14	8	333	.14
358	400	413	362	429	468	485	411	449	458	466	479	512	512	531	609	608	12,500	5.25
11	9	11	8	4	7	16	12	15	24	19	24	28	33	30	35	37	331	.14
5	6	7	8	5	3	4	4	7	6	4	2	5	13	10	19	33	169	.07
5	4	5	7	9	2	12	7	2	...	9	1	20	26	13	19	18	163	.07
3	...	2	1	2	1	4	...	2	3	2	...	2	3	3	6	2	48	.02
3	7	7	6	4	1	1	5	2	3	4	1	3	3	11	2	6	6	.00
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	149	.06
121	96	86	88	70	101	57	44	39	41	32	12	23	31	37	23	23	3,436	1.44
153	201	214	234	213	257	263	201	239	237	181	195	194	248	161	208	222	4,726	1.99
23	27	46	41	34	51	52	53	35	39	45	41	47	47	71	51	43	908	.38
488	508	483	569	568	655	776	665	685	669	635	542	686	966	742	715	870	18,303	7.68
15	18	23	18	26	34	22	24	38	32	18	19	14	21	24	18	26	800	.34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	.00
20	14	13	21	24	11	13	18	22	18	15	11	20	20	12	15	13	501	.21
...	4	3	2	4	1	4	3	2	3	2	1	1	7	4	...	4	44	.02
13	11	17	18	6	10	27	20	8	1	1	4	5	2	3	5	2	486	.20
1	...	2	...	2	...	...	1	...	...	...	...	...	2	4	6	2	141	.06
8	4	5	9	5	5	6	2	...	...	...	...	...	4	2	6	6	77	.03
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	3	.00
68	61	75	73	57	67	64	62	85	67	81	93	79	59	79	96	149	1,974	.83
309	507	470	613	572	655	650	614	597	659	539	579	606	773	633	612	638	16,082	6.75
104	131	124	127	136	182	148	147	158	123	114	119	140	104	121	146	139	5,118	2.14
13	14	12	18	22	24	26	19	26	15	22	36	24	50	66	45	47	43	.02
12	10	8	15	15	20	74	46	41	85	76	87	32	5	7	14	14	654	.27
1	1	1	1	...	1	1	1	2	...	2	1	...	...	1	4	...	787	.33
17	19	27	28	31	28	40	34	38	45	42	41	46	45	6	5	5	21	.01
2	2	2	4	2	3	4	2	4	2	5	10	4	3	4	12	12	20	.01
67	47	52	48	48	58	52	57	43	65	16	50	46	45	34	26	15	646	.27
1	1	...	...	...	...	...	1	3	1	...	1	1	1	1	1	3	74	.03
66	60	63	63	68	62	74	31	23	23	12	11	19	23	20	16	24	2,066	.87
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	.01
15	22	30	20	18	21	16	17	24	29	104	161	217	238	261	1	3	1,115	.47
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	706	.30
130	192	176	213	229	220	258	266	314	369	379	457	463	117	49	69	67	235	.10
39	21	34	17	18	41	44	47	34	27	8	12	14	9	946	461	544	6,043	2.54
1	1	5	2	2	...	4	5	6	3	4	2	7	4	3	2	2	1,012	.42
20	11	23	39	14	22	27	31	21	22	23	22	34	16	24	28	10	109	.05
1	2	1	3	3	...	1	1	1	1	2	1	2	3	1	3	1	622	.26
7	4	1	2	8	5	3	10	15	10	7	12	13	10	22	12	21	28	.01
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	215	.09
8	2	2	2	1	1	5	7	10	22	11	17	12	18	14	1	1	5	.00
1	3	4	2	6	7	6	11	14	15	19	7	11	10	...	9	4	159	.07
5	5	4	4	8	6	9	14	17	16	8	12	8	5	12	8	4	224	.09
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	186	.08
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32	.01

TABLE X.—*International Classification.*—Continued.

Bertillon Numbers	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
VII.								
THE PUERPERAL STATE.								
134	Accidents of Pregnancy.....							
136	Other Accidents of Labor.....							
137	Septicæmia, Puerperal.....	7	2	6	10	8	7	11
138	Albuminuria and Puerperal Eclampsia.....							
139	Phlegmasia Alba Dolens, Puerperal.....							
140	Other Puerperal Accidents—Sudden Death.....	5	7	9	14	13	24	14
VIII.								
DISEASES OF THE SKIN AND CELLULAR TISSUE.								
142	Gangrene.....	5	2	3	4	8	8	3
143	Carbuncle.....				1		1	1
144	Phlegmon: Acute Abscess.....	2		7	4	3	2	1
145	Other Diseases of the Skin and its Adnexa.....		3	2	3	6	1	1
IX.								
DISEASES OF THE ORGANS OF LOCOMOTION								
146	Diseases of the Bones (non-Tuberculous).....							
147	Arthritis, and Other Diseases of the Joints.....	3	1	2	7	6	6	9
X.								
MALFORMATIONS.								
150	Malformations, Congenital (still-births excepted).....	3	7	11	5	12	14	14
XI.								
EARLY INFANCY.								
151	Congenital Debility, Icterus, and Sclerema.....	2	13	34	17	17	33	25
152	Other Diseases of Early Infancy.....	8	21	29	16	35	29	31
153	Lack of Care.....							
XII.								
OLD AGE.								
154	Senile Debility.....	58	67	84	76	119	114	117
XIII								
AFFECTIONS PRODUCED BY EXTERNAL CAUSES.								
155	Suicide by Poison.....					1	2	2
156	Suicide by Asphyxia.....			1				
157	Suicide by Hanging or Strangulation.....			1	3	3	6	3
158	Suicide by Drowning.....						3	1
159	Suicide by Firearms.....							1
160	Suicide by Cutting Instruments.....							
161	Suicide by Jumping from High Places.....							
163	Other Suicides.....	3	3	6	1	4	2	2
164	Fractures.....	1	1		4			
166	Other Accidental Traumatisms*.....	31	23	19	16	40	38	37
167	Burns and Scalds.....	9	9	14	12	7	6	13
169	Insolation.....							
170	Freezing.....							
171	Electrical Disturbances.....							
172	Accidental Drowning.....	13	15	18	13	20	24	24
174	Absorption of Deleterious Gases (Suicide excepted).....	2	2		7	3		1
175	Other Acute Poisonings.....	1	3	6	4	3	5	4
176-1	Suffocation.....							
176-2	Injuries at Birth.....							
176-3	Other External Violence (Homicide).....	3		9	1	1	1	1
XIV.								
ILL-DEFINED DISEASES.								
177	Dropsy.....	45	34	32	50	48	44	41
179	Unspecified or Ill-defined Causes of Death.....	115	151	188	306	288	310	263

* Includes Accidental Gunshot Wounds, Injuries by Machinery. Railroad Accidents, Injuries by Horses and Vehicles, etc.

TABLE X.—*International Classification.*—Continued.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878
														3				
9	7	4	14	14	13	7	8	12	10	16	18	9	17	16	18	18	17	17
						2	7	4	4	6	7	4	5	13	13	6	5	11
13	19	23	21	23	18	22	19	16	23	22	27	32	24	28	22	24	24	15
10	11	7	8	6	12	6	7	6	4	7	10	12	12	5	12	11	8	10
	1				1	2		1	2	1	2		1		1	1	3	
7	11	4	7	9	7	8	15	10	4	9	11	10	10	18	9	18	7	13
4	6	5	2	3	1	5	7	4	4	2	5	2	7	6	7	5	5	7
5	15	8	9	7	5	5	6	12	11	15	5	11	18	15	16	27	15	10
15	13	11	13	8	10	12	17	16	15	14	15	17	15	17	15	11	26	32
42	45	35	47	46	62	54	60	47	34	57	53	100	169	154	135	75	67	72
31	40	41	34	28	31	23	30	23	24	34	20	31	50	42	20	22	27	16
116	132	143	161	193	152	178	188	206	217	204	232	233	254	223	216	241	213	222
1	2																	
3	1																	
4																		
3																		
1																		
5	4	8	13	6	12	11	15	18	15	27	19	18	8	18	26	18	22	21
55	31	50	74	66	52	69	61	56	62	63	66	84	86	55	79	69	76	74
24	21	14	10	12	16	18	16	16	15	12	12	12	14	23	17	12	18	11
								5										
32	29	29	21	26	20	27	23	20	24	30	24	29	36	39	35	37	30	4
1	3	3	1	1	1								4	6	5	9	5	
7	9	2	1	3	2	6	2		4	2	4	1	5	5	6	4	8	6
4	3	1	5	2		1	5		2	5		2	3	4	3	4	3	3
56	48	46	52	45	61	49	49	49	53	61	56	55	60	39	56	66	63	38
225	220	209	237	243	247	204	225	336	351	196	292	463	287	209	263	245	248	259

TABLE X.—*International Classification.*—Continued.

Berillon Numbers.	CAUSES OF DEATH	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
	VII								
	THE PUERPERAL STATE.								
134	Accidents of Pregnancy.....							2	2
136	Other Accidents of Labor.....								
137	Septicemia, Puerperal.....	9	15	22	28	16	12	19	10
138	Albuminuria and Puerperal Eclampsia.....	8	3	6	3	1	8	7	6
139	Pneumonia Alba Dolens, Puerperal.....	1							
140	Other Puerperal Accidents—Sudden Death.....	27	33	32	19	43	31	19	23
	VIII.								
	DISEASES OF THE SKIN AND CELLULAR TISSUE.								
142	Gangrene.....	14	11	14	6	10	15	19	6
143	Carbuncle.....	1		2	1	3	4	1	2
144	Phlegmon: Acute Abscess.....	14	5	17	14	18	18	21	13
145	Other Diseases of the Skin and its Adnexa.....	3	2	6	3	1	9	2	9
	IX.								
	DISEASES OF THE ORGANS OF LOCOMOTION.								
146	Diseases of the Bones (non-Tuberculous).....								
147	Arthritis, and other Diseases of the Joints.....	20	15	11	25	26	32	34	26
	X.								
	MALFORMATIONS.								
150	Malformations, Congenital (still-births excepted)..	19	13	26	21	19	22	15	15
	XI.								
	EARLY INFANCY.								
151	Congenital Debility, Icterus, and Sclerema.....	69	93	92	101	137	128	132	157
152	Other Diseases of Early Infancy.....	22	28	28	33	47	26	35	37
153	Lack of Care.....								
	XII.								
	OLD AGE.								
154	Senile Debility.....	220	273	247	283	275	293	267	276
	XIII.								
	AFFECTIONS PRODUCED BY EXTERNAL CAUSES.								
155	Suicide by Poison.....								
156	Suicide by Asphyxia.....								
157	Suicide by Hanging or Strangulation.....								
158	Suicide by Drowning.....								
159	Suicide by Firearms.....								
160	Suicide by Cutting Instruments.....								
161	Suicide by Jumping from High Places.....								
163	Other Suicides.....	13	10	23	31	25	22	20	17
164	Fractures.....								
166	Other Accidental Traumatisms*.....	73	87	82	107	94	11	98	97
167	Burns and Scalds.....	13	21	16	17	18	20	19	23
169	Insolation.....								
170	Freezing.....								
171	Electrical Disturbances.....								
172	Accidental Drowning.....	22	33	29	40	27	41	42	58
174	Absorption of Deleterious Gases (Suicide excepted).....			19	8	12	11	10	10
175	Other Acute Poisonings.....	5	5	9	6	6	7	9	6
176-1	Suffocation.....								
176-2	Injuries at Birth.....								
176-3	Other External Violence (Homicide).....	1	1	4	6	3	2	3	2
	XIV								
	ILL-DEFINED DISEASES.								
177	Dropsy.....	50	37	47	50	48	42	44	49
179	Unspecified or Ill-defined Causes of Death.....	302	279	402	316	208	61	116	90

* Includes Accidental Gunshot Wounds, Injuries by Machinery, Railroad Accidents, Injuries by Horses and Vehicles, etc.

TABLE. X.—*International Classification.*—Concluded.

1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	TOTAL AND PER- CENTAGE FOR 50 YEARS, 1853-1902.	
2	2	1	3	2	6	4	8	7	13	12	13	7	21	8	1	8	114	.05
25	18	17	19	12	30	21	32	24	16	19	34	26	49	42	33	29	76	.03
7	6	4	5	8	4	13	12	13	20	14	13	13	21	21	22	8	843	.35
20	25	19	19	15	29	27	13	7	7	6	2	3	3	2	5	2	320	.14
																	6	.00
																	930	.39
15	19	26	24	16	21	17	13	.....	.....	3	.....	.....	16	14	6	53	482	.20
3	.....	.....	2	2	4	3	3	3	2	1	2	1	4	2	4	4	69	.03
15	19	17	13	6	5	.....	1	7	24	13	29	6	5	5	6	6	489	.21
5	7	3	9	7	5	5	26	10	12	3	4	5	.....	5	3	.....	247	.10
23	15	18	25	20	17	14	19	23	22	18	12	18	7	6	13	17	26	.01
													2	1	1	1	686	.29
18	20	19	25	28	16	24	23	32	32	30	35	46	47	57	79	70	1,039	.44
211	230	195	225	251	245	224	373	344	390	372	257	294	316	315	450	392	7,096	2.99
34	51	55	41	75	37	53	66	73	28	40	26	21	16	18	25	32	1,651	.69
													1	.....	7	16	8	.00
278	290	227	198	185	256	183	187	282	293	253	205	228	208	234	261	202	10,321	4.33
.....	3	2	4	9	3	5	8	6	6	9	14	5	13	11	12	16	118	.05
.....	2	1	2	2	1	1	6	2	10	4	4	6	1	5	6	13	53	.02
.....	7	8	1	5	1	4	15	3	8	6	9	10	13	13	10	9	133	.06
.....	3	3	5	2	2	2	8	5	.....	6	8	6	9	7	6	5	78	.03
.....	4	.....	13	2	4	3	11	12	11	8	7	10	15	12	10	.....	116	.04
.....	2	.....	2	3	1	4	.....	4	2	4	2	6	8	4	6	1	49	.02
.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	.....	1	1	7	.00
16	7	5	8	3	8	1	5	.....	.....	.....	.....	.....	.....	.....	1	.....	520	.22
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.00
122	95	126	129	124	187	160	118	163	141	146	156	158	185	163	189	213	4,550	1.90
17	27	20	20	18	21	26	28	28	25	41	21	28	33	36	34	34	933	.39
6	1	.....	6	5	17	.....	8	4	47	1	23	2	13	37	3	7	178	.08
1	1	2	1	.....	2	2	1	2	2	3	4	3	.....	14	5	5	41	.02
.....	2	2	1	.....	1	.....	.....	2	6	1	2	2	.....	3	3	5	23	.01
39	46	52	71	52	48	47	52	61	39	40	60	45	64	57	47	72	1,794	.75
14	8	9	12	17	26	14	21	22	24	22	19	31	53	33	16	21	465	.20
7	12	5	10	15	9	13	6	11	12	8	10	6	14	6	9	9	309	.13
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	10	11	.01
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35	32	35	.02
2	5	3	2	1	4	3	9	6	2	12	13	15	10	7	11	9	193	.08
39	48	51	48	38	42	44	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,980	.83
54	74	88	88	69	62	99	57	60	52	33	33	26	33	42	59	46	9,247	3.88

TABLE XI.—OCCUPATIONS AND AGES OF DECEDENTS.

Showing the Number and Occupation of Decedents for the year 1903 and for a period of Fifty-one Years and Seven Months, 1852 to 1903, inclusive.

[AGES UNDER TWENTY EXCLUDED.]

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS.		
	June 1, 1852, to December 31, 1903.					
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
I.						
TILLERS OF THE SOIL.						
Farmers.....	169	11,617	68.74	7,681	515,811	67.15
Florists.....	2	123	61.50	69	3,816	55.30
Gardeners.....	26	1,432	55.07	405	23,972	59.19
Total.....	197	13,172	66.86	8,155	543,599	66.66
II.						
PROFESSIONAL AND PERSONAL.						
Acrobats.....				1	24	24.00
Actors.....	5	214	42.80	22	797	36.22
Aeronauts.....				1	23	23.00
Architects.....	1	36	36.00	22	1,252	56.91
Artists.....	4	170	42.50	49	2,553	32.10
Assayers and Analytical Chemists.....	2	94	47.00	10	600	60.00
Athletes.....				1	25	25.00
Authors.....				9	926	69.56
Ball-players.....				2	65	32.50
Chiroprodists.....				1	58	58.00
Civil Engineers.....	3	133	44.33	59	2,958	50.14
Clergymen.....	6	339	56.50	303	19,336	63.81
Couriers.....				2	113	56.50
Dancing-masters.....				3	173	57.67
Dentists.....	3	121	40.33	63	3,332	52.88
Designers.....	1	73	73.00	28	1,468	52.43

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Draughtsmen.....	2	87	43.50	21	716	34.10
Electricians.....	5	191	38.20	34	1,230	36.18
Inspectors.....	3	140	46.67	29	1,440	49.66
Inventors.....				16	1,054	65.87
Journalists (Editors and Reporters).....	1	40	40.00	57	2,671	46.86
Judges and Justices.....	1	69	69.00	19	1,225	64.47
Lawyers.....	13	832	64.00	226	13,049	57.74
Lecturers.....				2	108	54.00
Musicians.....	7	304	43.43	97	4,526	46.66
Nurses.....	1	25	25.00	20	1,047	52.35
Photographers and Lithographers.....	1	56	56.00	34	1,599	47.03
Physicians.....	12	742	61.83	380	22,594	59.46
Poets.....	1	82	82.00	1	82	82.00
Professors and Teachers.....	2	99	49.50	160	8,032	50.20
Proofreaders.....	1	72	72.00	1	72	72.00
Public Officers.....	5	318	63.60	111	6,702	60.38
Publishers.....				2	105	52.50
Sculptors.....				1	41	41.00
Secretaries.....	1	51	51.00	1	51	51.00
Sheriffs and Policemen.....	4	214	53.50	161	8,759	54.40
Stenographers.....	1	69	69.00	1	69	69.00
Students.....	2	68	34.00	96	2,224	23.17
Submarine Divers.....				1	73	73.00
Telegraph and Telephone Operators.....				29	868	29.93
Treasurers.....	3	115	38.33	16	812	50.75
Trustees.....				4	229	57.25
Veterinary Surgeons.....				10	539	53.90
Weighers and Gaugers.....				9	576	64.00
Total.....	91	4,754	52.24	2,115	114,196	53.05
III.						
OPTIONAL ACTIVITY.						
Agents and Canvassers.....	11	567	51.55	259	13,464	51.98
Insurance.....	4	200	50.00	45	2,427	53.98

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS.		
				June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Agents, Real Estate.....	3	179	59.77	31	1,978	63.81
Auctioneers.....				6	274	45.67
Bankers and Brokers.....	9	580	64.44	195	11,756	60.29
Bank Officers.....				77	4,955	64.35
Bartenders.....	5	158	31.60	68	2,418	35.56
Booksellers.....				4	291	72.75
Bottlers.....				10	360	36.00
Butchers and Marketmen..	14	734	52.43	355	18,443	51.96
Carriage Dealers.....				2	113	56.50
Coal and Wood.....	3	171	57.00	25	1,456	58.24
Dry Goods.....				4	207	51.75
Fish and Oyster.....	2	142	71.00	35	2,108	60.23
Furniture.....	1	80	80.00	8	522	65.25
Hardware.....	1	70	70.00	9	569	63.22
Ice.....				7	368	52.57
Junk.....				19	1,079	56.79
Leather.....				2	81	40.50
Liquor.....	3	124	41.33	147	6,848	46.59
Lumber.....	4	270	67.50	24	1,397	58.21
Music.....				1	61	61.00
News.....				8	422	52.75
Oil.....				1	47	47.00
Provision.....	2	137	68.50	30	1,741	58.03
Shoe.....				14	757	54.07
Wool Waste.....				1	56	56.00
Clothiers.....				18	991	55.05
Collectors.....	3	194	64.67	12	622	51.83
Commercial Travelers.....	7	394	56.29	46	2,166	47.09
Contractors and Builders...	10	694	69.40	155	9,294	59.96
Druggists and Apothecaries	10	425	42.50	150	10,035	66.90
Fish Culturists.....	1	75	75.00	1	75	75.00
Fruiterers.....	2	100	50.00	12	574	47.83
Grocers.....	13	751	57.77	545	29,818	54.71
Hotel and Inn-keepers.....	6	353	58.83	194	10,732	55.32
Saloon and Restaurant...	8	398	49.75	232	10,716	46.19
Stable.....	6	310	51.67	90	4,918	55.76
Store.....	12	730	60.83	86	4,712	54.79
Jobbers.....	1	56	56.00	1	56	56.00
Manufacturers.....	28	1,936	69.14	748	45,825	61.26

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Manufacturers, Stove.....				7	416	59.43
Merchants.....	41	2,509	61.20	1,516	87,888	57.97
Opticians.....	1	76	76.00	9	534	59.33
Organ and Piano Tuners...				6	402	67.00
Policy Brokers.....				1	24	24.00
Pork and Meat Cutters and Packers.....	1	39	39.00	27	1,203	44.56
Promoters.....				1	25	25.00
Railroad Officials.....	2	127	63.50	13	735	56.54
Ship Chandlers.....				5	318	63.60
Tobacconists.....	2	96	48.00	19	1,073	56.47
Traders (Horse).....	1	60	60.00	284	14,319	50.42
Undertakers.....	1	62	62.00	62	3,519	56.76
Total.....	218	12,736	58.42	5,627	315,188	56.01
IV.						
OUTDOOR.— <i>Local.</i>						
Boat-builders.....	2	148	74.00	35	2,210	63.14
Brickmakers.....				8	352	44.00
Brick and Stone-layers....	5	165	33.00	20	912	45.60
Calkers.....	1	81	81.00	16	1,114	69.62
Carpenters and Joiners....	118	7,692	65.19	2,621	148,919	56.82
Masons.....	43	2,813	65.42	1,086	61,605	56.73
Millwrights.....	1	62	62.00	42	2,867	68.26
Riggers.....				25	1,343	53.72
Roofers.....				8	415	55.33
Ship Carpenters.....	1	84	84.00	90	6,211	69.01
Slaters.....	2	132	66.00	12	572	47.67
Stone Cutters and Marble Workers.....	18	933	51.83	28	1,373	49.04
Superintendents of Highways.....				1	79	79.00
Tanners and Curriers.....	2	126	63.00	65	4,140	63.69
Wheelwrights.....	7	485	69.29	131	7,949	60.68
Total.....	200	12,721	63.60	4,188	240,061	57.32

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
V.						
INDOOR.— <i>Active.</i>						
Axe and Seythe-grinders....				4	222	55.50
Bakers.....	9	477	53.00	205	12,900	62.93
Basket-makers.....	1	53	53.00	8	457	57.12
Belt.....	4	106	26.50	19	976	51.37
Bobbin.....				7	385	55.00
Boiler.....	2	108	54.00	96	4,127	42.99
Bolt.....				3	158	52.67
Broom and Brush.....				18	905	50.28
Button.....				1	37	37.00
Cabinet.....	5	245	49.00	159	9,353	58.82
Card.....				4	201	50.25
Carriage, and Trimmers..	3	195	65.00	156	9,183	58.87
Chair.....				1	70	70.00
Comb.....				5	187	37.40
Frame.....				1	42	42.00
Mattress.....				1	38	38.00
Pattern.....	2	90	45.00	96	5,639	58.74
Pianoforte.....				3	157	52.33
Picker.....				5	303	60.06
Plane.....				1	79	79.00
Pump and Block.....				14	788	55.71
Reed.....	1	28	28.00	7	380	54.29
Sash and Blind.....				10	502	50.20
Seythe.....				1	83	83.00
Spindle.....				5	297	59.40
Stopper.....				1	22	22.00
Stove, and Mounters....	1	67	67.00	6	312	52.00
Tool.....	7	408	58.29	55	2,926	53.20
Trunk.....	1	53	53.00	4	142	35.50
Umbrella.....				2	103	51.50
Wringer.....				4	112	28.00
Beamers.....				2	59	29.50
Bell-hangers.....				2	47	23.50
Blacksmiths and Farriers...	17	990	58.23	838	46,119	55.03
Bleachers and Fullers.....	6	332	55.33	84	4,208	50.10
Bonnet-dressers.....				2	73	36.50

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Bottlers.....	2	88	44.00	2	88	44.00
Brewers.....	2	71	35.50	27	1,298	48.07
Britannia-workers.....				1	65	65.00
Car-builders.....				1	57	57.00
Stair.....				4	219	54.75
Card-grinders.....				3	138	46.00
Carvers.....				3	147	49.00
Confectioners.....	3	143	47.67	59	2,717	46.05
Cooks and Caterers.....	5	189	37.80	162	7,939	49.01
Coopers.....	3	188	62.67	139	9,198	66.17
Coppersmiths.....				16	696	60.56
Cutters.....				8	394	49.25
Nail.....				12	490	40.83
Decorators.....	1	53	53.00	15	579	38.60
Distillers.....				1	77	77.00
Dyers.....	8	448	56.00	173	8,926	51.60
Founders, Brass and Iron..	1	25	25.00	24	1,175	48.96
Foundrymen.....				24	1,273	53.04
Gas Fitters.....				65	2,830	43.54
Gilders.....				12	535	44.58
Gun and Locksmiths.....				28	1,525	54.46
Hatters.....				28	1,538	54.93
Heaters.....	1	44	44.00	8	341	42.63
Iron Rollers and Workers..				21	1,006	47.90
Japanners.....				1	47	47.90
Lathers.....	1	36	36.00	10	412	41.20
Loomfixers.....	9	384	42.67	24	1,117	46.54
Machinists.....	70	3,478	49.69	1,997	97,845	48.99
Mechanics.....	12	576	48.00	543	28,755	52.96
Melters.....	1	72	72.00	13	739	56.85
Miners.....				20	1,170	58.50
Moulders.....	18	1,047	58.17	423	23,027	54.44
Painters and Glaziers.....	64	3,219	50.30	1,297	64,006	49.35
Paper-hangers.....	1	22	22.00	26	1,336	51.38
Plasterers and Stucco-work- ers.....	2	92	46.00	69	3,332	48.29
Platers.....	1	33	33.00	5	284	56.80
Electro.....				6	389	64.83
Gold.....	1	46	46.00	5	209	41.80
Plumbers.....	11	475	43.18	147	5,850	39.80

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Pressmen.....				6	261	43.50
Refiners.....	1	30	30.00	6	219	36.50
Gold.....				4	179	44.75
Oil.....				1	76	76.00
Sugar.....				8	390	48.75
Soap-boilers.....				5	353	70.60
Stampers.....	1	35	35.00	1	35	35.00
Steam-pipers.....	7	282	40.27	26	1,020	39.23
Superintendents and Overseers.....	36	2,021	56.14	488	27,476	56.30
Tallow Chandlers.....				4	322	80.50
Tinsmiths.....	5	290	58.00	164	8,049	49.08
Upholsterers.....	3	144	48.00	69	2,910	42.17
Wire-workers.....	3	139	46.33	22	937	42.59
Wood-carvers.....				4	149	37.25
Finishers.....	2	84	42.00	9	467	51.89
Turners.....	2	92	46.00	67	3,046	45.46
Totals.....	336	16,998	50.59	8,136	419,250	51.53
VI.						
INDOOR.— <i>Activity Restricted.</i>						
Barbers.....	11	443	40.27	327	11,790	36.06
Bookbinders.....				29	1,350	46.55
Bookkeepers.....	27	1,409	52.18	507	23,427	46.21
Box-makers.....				27	1,349	49.96
Chain.....				5	261	52.20
Cigar.....	4	203	50.75	121	5,646	46.66
Clock and Watch.....	3	214	71.33	48	2,741	57.10
Harness and Saddle.....	3	192	64.00	146	7,456	51.07
Paper.....				7	389	55.57
Rope.....				25	1,672	66.88
Sail.....				39	2,290	58.72
Shoe.....	21	1,244	59.24	705	40,941	58.07
Carders.....	4	257	64.25	23	1,274	55.39
Chasers.....	2	119	59.50	22	894	40.64

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS.		
				June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Clerks and Salesmen.....	101	3,948	39.01	1,679	63,743	37.96
Compositors.....	1	35	35.00	10	489	48.90
Die Cutters and Sinkers ...	4	239	59.75	29	1,448	49.93
Enamelers.....				10	523	52.30
Engravers.....	4	218	54.50	163	8,057	49.43
File Cutters and Forgers...	3	171	57.00	112	4,679	41.78
Finishers.....	2	134	67.00	28	1,462	52.21
Brass.....				8	346	43.25
Cloth.....	1	63	63.00	1	63	63.00
Folders.....	1	62	62.00	9	433	48.11
Glass-blowers.....	1	77	77.00	2	134	67.00
Jewelers.....	48	2,313	48.19	1,378	58,887	42.73
Shell.....				3	182	60.67
Knitters.....	1	40	40.00	5	146	29.20
Lapidaries.....				13	494	38.00
Millers.....	1	52	52.00	56	3,300	58.93
Operatives.....	67	3,185	47.54	2,966	131,209	44.24
Pearl-cutters.....				4	157	39.25
Polishers.....	3	129	43.00	53	2,428	45.81
Furniture.....	2	84	42.00	2	84	42.00
Marble.....				1	62	62.00
Silver.....				2	59	29.50
Steel.....				1	42	42.00
Printers.....	15	696	46.40	245	13,648	56.16
Calico.....	1	70	70.00	60	3,313	55.22
Proofreaders.....				1	70	70.00
Roll-coverers.....	2	152	76.00	36	2,099	58.31
Rubber-workers.....	11	448	40.73	236	9,997	42.36
Silversmiths.....	12	549	45.75	163	7,412	45.47
Spinners.....	9	484	53.78	19	1,050	55.26
Tailors.....	10	517	51.70	500	27,868	55.74
Weavers.....	35	1,500	42.86	121	5,857	48.40
Wool-sorters.....	1	59	59.00	78	3,884	49.82
Totals.....	411	19,306	46.97	10,025	455,105	45.40
VII.						
OCCUPATIONS AT LARGE.						
Army Officers.....				9	530	58.88
Naval.....	1	41	41.00	22	1,052	47.82

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Baggage Masters.....	1	80	80.00	5	204	40.80
Bill-posters.....				3	162	54.00
Boatmen.....				35	1,914	54.69
Bootblacks.....				1	46	46.00
Brakemen.....	14	424	30.28	167	5,015	30.03
Butlers.....				8	285	35.63
Coachmen.....	4	254	63.50	227	10,228	45.06
Conductors and Motormen..	11	383	34.82	90	3,678	40.87
Drivers.....	8	253	31.62	67	2,450	36.57
Hack and Cab.....	4	134	33.50	72	3,077	42.74
Stage.....				8	398	49.75
Drovers.....				2	83	41.50
Elevator Operators.....	2	60	30.00	6	226	37.67
Engineers and Firemen....	28	1,510	53.93	589	29,629	50.30
Expressmen.....	2	66	33.00	122	6,133	50.27
Fire Company Members....				14	670	47.86
Fishermen and Oystermen..	16	916	57.25	319	17,267	54.13
Footmen.....				1	24	24.00
Highway Surveyors.....				1	61	61.00
Hostlers.....	5	217	43.40	188	8,128	43.23
House Movers.....	2	108	54.00	9	611	67.89
Ice-men.....				6	395	65.83
Janitors.....	7	444	63.43	141	7,808	55.37
Laborers.....	433	21,560	49.79	12,460	615,378	49.39
Lamplighters.....	1	40	40.00	22	1,192	54.18
Laundrymen.....	4	124	31.00	32	1,341	41.91
Linemen.....	2	72	36.00	17	741	43.59
Longshoremen.....	1	29	29.00	12	488	40.67
Lumbermen.....				5	266	53.20
Mail Carriers.....				25	1,126	45.04
Marines.....				1	21	21.00
Messengers.....	1	53	53.00	1	53	53.00
Milkmen.....	3	168	56.00	28	1,104	39.43
Pavers.....	1	24	24.00	4	153	38.25
Peddlers.....	13	604	46.46	232	11,609	50.04
Pilots.....	4	233	58.25	31	1,788	57.68
Porters.....	1	34	34.00	59	2,753	46.66
Railroad Employees.....	8	342	42.75	8	342	42.75
Station Agents.....				1	40	40.00
Roofers.....	1	76	76.00	3	202	67.33
Sailors.....	14	697	49.79	368	17,995	48.98

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1803.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Sailors, U. S. Navy.....	2	114	57.00	2	114	57.00
Scissors-grinders.....				1	72	72.00
Sea Captains and Ship Mas- ters.....	5	277	55.40	216	15,286	70.77
Servants.....	2	85	42.50	33	1,464	44.36
Sextons.....				13	813	62.54
Sinkers of Artesian Wells..				3	163	54.33
Soldiers.....				164	5,067	30.90
Stevedores.....				20	936	46.80
Stewards.....	3	122	40.67	33	1,536	46.54
Switchmen and Gatemen...	3	145	48.33	34	1,878	55.24
Teamsters.....	55	2,555	46.45	878	41,217	46.94
Theatrical Managers.....				3	137	45.67
Waiters.....	13	438	33.69	162	6,431	39.70
Watchmen.....	9	537	59.67	231	13,319	57.66
Whitewashers.....				8	452	56.50
Wood Sawyers.....				5	239	47.80
Totals.....	684	33,219	48.57	17,227	845,790	49.10
VIII.						
EMPLOYMENTS OF WOMEN.						
Actresses.....				3	112	37.33
Agents.....				1	59	59.00
Artists.....				7	370	52.86
Authoresses.....				1	66	66.00
Bakers.....				1	42	42.00
Basket-makers.....				2	149	74.50
Box.....				6	179	29.83
Broom and Brush.....				1	34	34.00
Braid.....				1	66	66.00
Cap.....				1	28	28.00
Chain.....				6	206	34.33
Cigar.....				8	243	30.37
Dress, and Seamstresses..	27	1,376	50.96	456	18,906	41.46
Boarding-house Keepers...				27	1,677	62.11
Boat-women.....				1	60	60.00
Bookkeepers.....	2	44	22.00	26	783	30.12
Charwomen.....				1	60	60.00
Clerks and Saleswomen....	8	336	42.00	71	2,141	30.15

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Compositors.....	..	..	..	2	62	31.00
Cooks.....	4	169	42.25	73	3,835	52.53
Farming.....	..	..	..	2	124	62.00
Folders.....	..	..	..	1	20	20.00
Hairdressers.....	..	..	..	2	55	27.50
Jewelers.....	4	102	25.50	29	806	27.79
Laboring.....	..	..	..	18	783	43.50
Lacemakers.....	1	21	21.00	2	70	35.00
Laundresses.....	5	207	41.40	63	3,059	48.56
Managers.....	1	66	66.00	1	66	66.00
Matrons.....	..	..	..	3	148	49.33
Weavers.....	..	..	..	2	128	64.00
Milliners.....	2	55	27.50	69	2,430	35.22
Modistes.....	..	..	..	1	38	38.00
Musicians.....	..	..	..	4	125	31.25
Nurses.....	4	266	66.50	153	8,718	56.98
Oculists.....	..	..	..	1	59	59.00
Operatives.....	35	1,095	31.29	1,236	39,734	32.15
Physicians.....	..	..	..	12	677	56.42
Postmistresses.....	..	..	..	1	28	28.00
Public Officers.....	..	..	..	2	110	55.00
Rubber-workers.....	1	30	30.00	26	751	28.88
Sculptors.....	..	..	..	1	30	30.00
Servants.....	24	1,021	42.54	664	31,304	47.14
Sisters of Mercy.....	1	37	37.00	40	1,615	40.37
Stenographers.....	1	42	42.00	3	108	36.00
Stewardesses.....	..	..	..	2	114	57.00
Store-keepers.....	4	210	52.50	12	580	48.33
Students.....	1	20	20.00	2	41	20.50
Superintendents.....	..	..	..	2	126	63.00
Tailoresses.....	3	110	36.67	157	7,349	46.81
Teachers.....	12	584	48.67	287	14,280	49.75
Music.....	..	..	..	2	52	26.00
Telegraph and Telephone Operators.....	1	22	22.00	11	321	29.18
Typewriters.....	..	..	..	2	62	31.00
Upholsterers.....	..	..	..	1	34	34.00
Waitresses.....	2	85	42.50	14	426	30.43
Weavers.....	16	521	32.56	28	989	35.32
Totals.....	159	6,419	40.37	3,551	144,438	40.68

TABLE XI.—OCCUPATIONS AND AGES.—(RECAPITULATION.)

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1903.			FIFTY-ONE YEARS AND SEVEN MONTHS. June 1, 1852, to December 31, 1903.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
I.						
TILLERS OF THE SOIL.....	197	13,172	66.86	8,155	543,599	66.66
II.						
PROFESSIONAL AND PERSONAL.....	91	4,754	52.24	2,115	114,196	53.05
III.						
OPTIONAL ACTIVITY.....	218	12,736	58.42	5,627	315,188	56.01
IV.						
OUTDOOR.— <i>Local</i>	200	12,721	63.60	4,188	240,061	57.32
V.						
INDOOR.— <i>Active</i>	336	16,998	50.59	8,136	419,250	51.53
VI.						
INDOOR.— <i>Activity Restricted</i>	411	19,306	46.97	10,025	455,105	45.40
VII.						
OCCUPATIONS AT LARGE...	684	33,219	48.57	17,227	845,790	49.10
VIII.						
EMPLOYMENTS OF WOMEN.	159	6,419	40.37	3,551	144,438	40.68
ALL CLASSES.....	2,296	119,325	51.97	59,024	3,077,627	52.14

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Artists.....	4	1						1		1																		1	
Assayers and Analytical Chemists.....	2										1											1							
Civil Engineers.....	2																1									1			
Clergymen.....	6	1				1											1		1					1		1			
Dentists.....	3	1								1	1																		
Designers.....	1																									1			
Draughtsmen.....	2	1																1											
Electricians.....	5	1				1		1		1				1				1		1									
Inspectors.....	3																1		1							1			
Journalists (Editors and Reporters) ..	1										1																		
Lawyers.....	12								2	1								1	2			2		1		3			
Musicians.....	6									2								1				1						2	
Photographers.....	1					1																							
Physicians.....	11			1		1			1	1	1							1	1			5							1
Poets.....	1																												
Postmasters.....	1																	1											
Professors and Teachers.....	2								1																	1			
Proofreaders.....	1									1																			

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Brick and Stone Layers.....	5									2								1					1						
Calkers.....	1																	1											
Carpenters and Joiners.....	109	9	2	8		1	2	3	4	14			2				2	22		2		12	6	6		10			4
Masons.....	40	4		1			1	1	4	3		1	1				1	7		3	1	3	1	2		5			1
Millwrights.....	1																				1								
Ship Carpenters.....	1											1																	
Slaters.....	2																												
Stone-cutters and Marble Workers.....	18	2		1				2	7	1							2												
Tanners and Curriers.....	2		1						1																				
Wheelwrights.....	6								1	1			1					1		1		1							
Totals.....	187	15	2	11		2	3	4	11	28	1	2	4				3	34	6	2		16	9	8		21			5
V.																													
Indoor.—Active.																													
Bakers.....	9									2								3		1		1	1						1

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.																											
	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Steam-pipers.....	2	7							2												2	1						
Superintendents and Overseers.....	1	34	5			5		3	3		1	1			1	1	2				7		1		3			
Tinsmiths.....	1	5							2								1								1			
Upholsterers.....		3					1													1					1			
Wire-workers.....	2	2							1												1							
Wood-finishers.....	2	2						1																	1			
Wood-turners.....	1	1																										
Totals.....	319	28	6	27		11	318	58	2	1	5	1	1	1	2	3	43	6	1	2	57	8	4	1	21	3	2	5
INDOOR.—ACTIVITY RESTRICTED.																												
VI.																												
Barbers.....	11	1			1			1	4																3	1		
Bookkeepers and Accountants.....	25	1	3					2	5	1							4	1		1	2	1			2			1
Carders.....	4								3																			
Chasers.....	2																				2							

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, —1903.

OCCUPATIONS.	Whole number.																											
	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia	Rheumatism.	Stomach Diseases.	Suicide.
Cigar-makers.....	4	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clock and Watch.....	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..
Glass.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Harness and Saddle.....	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..
Shoe.....	19	..	2	..	..	..	..	4	..	..	..	..	..	..	..	1	4	1	..	6	..	..	..	..	..	..	..	..
Clerks and Salesmen.....	90	5	6	1	1	1	..	4	20	..	2	1	..	3	12	1	14	5	1	1	14	5	1	7	1	1	2	2
Bank Clerks.....	3	1	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Hotel Clerks.....	2	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Compositors.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Die-sinkers.....	4	1	..	..	1	1	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..
Engravers.....	4	1	1	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
File-cutters.....	3	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..
Finishers.....	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Cloth.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Folders.....	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Jewelers.....	46	3	2	2	1	1	..	2	13	..	1	1	..	2	..	8	..	..	..	1	5	1	..	..	2	..	2	2
Knitters.....	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Millers.....	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.	Accidents.																	Suicide.
		Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	
Brakemen.....	14	10	1	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..
Coachmen.....	4	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
Conductors and Motormen.....	10	1	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	1
Drivers.....	8	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..
Hack and Cab.....	3	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Elevator Operators.....	2	..	..	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..
Engineers and Firemen.....	26	5	1	4	2	1	1	3	1	1	..	1	..	1	1	3	..	2	..
Expressmen.....	2	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Fishermen and Oystermen.....	16	3	1	..	..	..	..	3	1	1	..	..	..	1	1	6	..	..	1
Hostlers.....	5	..	1	..	..	..	..	2	..	..	..	..	..	1	1	..	..	1	..
House Movers.....	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Janitors.....	7	..	..	..	..	1	1	..	1	1	..	..	..	..	..	1	1	1	..
Laborers.....	419	47	13	1	1	7	23	88	4	4	8	2	3	1	5	57	3	2	57
Lamplighters.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Laundrymen.....	4	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..
Linemen.....	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Longshoremen.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Messengers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.																												
		Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
Milkmen.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..
Naval Officers.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pavers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Peddlers.....	12	1	..	..	..	..	..	1	1	1	..	1	1	..	..	..	..	3	..	..	..	3	..	..	..	1	1	..	1
Pilots.....	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	1
Porters.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Railroad Employees.....	7	2	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	3	..	..	..	..	..	..	1
Roofers.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Sailors and Mariners.....	14	3	1	..	..	..	..	..	3	..	..	..	..	..	..	..	..	2	..	..	..	1	2	2	..	..	..	..	1
Sailors, U. S. Navy.....	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Sea Captains or Ship Masters.....	5	..	1	..	..	..	1	1	1	..	..	..	..	..	..	..	..	1	..	..	..	1	1	1	..	..	..	..	..
Servants.....	2	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Stewards.....	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Switchmen and Gatemen.....	3	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Teamsters.....	53	4	2	2	1	..	..	3	2	12	..	..	..	..	..	..	2	5	1	..	..	6	2	3	..	6	1	1	1
Waiters.....	13	1	..	1	..	1	..	1	1	5	..	..	..	..	..	..	2	1	..	..	..	2	..	..	..	..	..	..	1
Watchmen.....	9	..	3	..	..	1	1	1	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1
Totals.....	661	87	21	25	2	3	10	12	31	134	4	7	9	2	3	2	13	91	5	3	2	69	18	20	..	73	5	3	7

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
VIII.																													
EMPLOYMENTS OF WOMEN.																													
Bookkeepers.....	2	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clerks.....	8	1	..	2	..	2	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cooks.....	4	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..
Dress Makers and Seamstresses.....	26	1	..	3	..	..	1	1	2	3	1	..	..	..	..	..	..	2	1	..	..	8	..	..	..	2	..	..	..
Jewelers.....	4	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Lace Workers.....	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Laundresses.....	4	..	..	2	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Managers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Milliners.....	2	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nurses.....	4	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	1	..	..	..	..
Operatives.....	35	7	..	..	..	..	..	..	13	1	1	2	..	..	..	..	..	5	..	..	..	1	..	..	..	4	..	1	..
Rubber-workers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Servants.....	24	2	..	..	1	..	..	..	2	8	..	..	..	..	..	..	..	..	..	2	1	2	1	..	..	3	..	1	1

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—Continued.

OCCUPATIONS.	Whole number.	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
		1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..
Sisters of Mercy.....	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stenographers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Store Keepers.....	3	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..
Students.....	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Tailoresses.....	3	..	..	..	..	1	..	..	1	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..
Teachers.....	11	..	2	..	..	1	..	1	3	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	2	..	..	..
Telegraph Operators.....	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Waitresses.....	1	..	..	..	..	1	..	..	..	1	..	..	..	1	..	1	..	..	..	1	..	2	..	..	..	2	..	..	..
Weavers.....	15	1	..	1	..	..	..	..	..	7	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals.....	153	14	10	..	1	4	1	1	12	44	2	2	2	1	..	..	1	13	4	2	3	14	1	1	1	15	..	5	1

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—(RECAPITULATION.)

OCCUPATIONS.	Whole number.	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.
I.																													
TILLERS OF THE SOIL.....	196	11	..	28	..	..	5	6	12	9	1	1	3	..	3	1	..	40	8	..	1	21	2	14	..	23	1	3	3
II.																													
PROFESSIONAL AND PERSONAL	85	7	..	2	..	2	2	1	5	12	6	..	..	1	..	..	3	9	3	1	..	15	..	2	..	10	..	3	1
III.																													
OPTIONAL ACTIVITY.....	211	8	5	20	1	3	8	4	14	26	3	..	..	..	3	..	4	36	1	3	3	33	10	6	1	10	1	4	4
IV.																													
OUTDOOR.—Local.....	187	15	2	11	..	2	3	4	11	28	1	2	4	..	..	..	3	34	6	2	..	16	9	8	..	21	..	5	..
V.																													
INDOOR.—Active.....	319	28	6	27	..	..	11	3	18	58	2	1	5	1	1	2	3	43	6	1	2	57	8	4	1	21	3	2	5

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1903.—(RECAPITULATION.)—Concluded.

OCCUPATIONS.	Whole number.	Accidents.	Alcoholism.	Apoplexy and Cerebral Hemorrhage.	Asthma.	Bladder Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Consumption.	Diabetes.	Dysentery.	Diarrhea and Enteritis.	Epilepsy.	Erysipelas.	Fever, Malarial.	Fever, Typhoid.	Heart Diseases.	Influenza.	Insanity.	Intestinal Diseases.	Kidneys, Bright's Dis. of.	Liver Diseases.	Old Age.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.	
VI.																														
INDOOR.— <i>Activity Restricted.</i>	391	17	6	23	2	8	5	20	104	3	2	5	3	3	8	53	3	2	5	57	13	5	26	4	3	11				
VII.																														
OCCUPATIONS AT LARGE....	661	87	21	25	2	3	10	12	31	134	4	7	9	2	3	2	13	91	5	3	2	69	18	20	73	5	3	7		
VIII.																														
EMPLOYMENTS OF WOMEN...	153	14	..	10	1	4	1	12	44	2	2	2	2	1	..	1	13	4	2	3	14	1	1	15	..	5	1			
ALL CLASSES.....	2,203	187	40	146	3	13	51	36	123	415	22	15	28	8	13	5	35	319	36	14	16	282	61	60	2	199	14	28	32	

TABLE XII.—SUPPLEMENTAL DISEASES.—Concluded.

OCCUPATIONS.		Whole number.	Abcess of Pancreas.	Abcess of Rectum.	Addison's Disease.	Anemia, Pernicious.	Aneurism of Aorta.	Appendicitis.	Chlorosis	Diphtheria.	Gallstones.	Glanders.	Goitre, Exophthalmic.	Hernia.	Hodgkin's Disease.	Homicide.	Insomnia.	Lead Poisoning.	Locomotor Ataxia.	Measles.	Mumps.	Myelitis.	Necrosis of Femur	Necrosis of Tibia.	Neuritis.	Otitis Media.	Prostate Disease.	Pulmonary Embolism.	Purpura Hemorrhagica.	Quinsy.	Synovitis of Elbow.	Uterine Fibroid.	Uterine Myomata
Teamsters.....	2	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Weavers.....	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wheelwrights.....	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wire-workers.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Wood-turners.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Totals.....	87	1	2	1	5	7	24	1	3	1	..	9	1	5	1	1	3	2	2	..	1	1	2	2	8	1	1	1	1	1	1	1	..
FEMALES.																																	
Dressmakers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Laundresses.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Store-keepers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Teachers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Waitresses.....	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Weavers.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals.....	6	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1
Grand Totals.....	93	1	2	1	5	7	24	1	3	1	1	9	1	5	1	1	4	2	2	1	1	2	2	8	1	1	1	1	1	1	1	1	1

RESULTS AND OBSERVATIONS.

GENERAL SUMMARY.

The number of births registered in the State of Rhode Island, during the year 1903, was eleven thousand seven hundred and eighty-one (11,781); the number of marriages, four thousand four hundred and seventy-three (4,473); and the number of deaths, eight thousand six hundred and forty-two (8,642).

TABLE XIII.

General Results of Registration for Ten Years, 1854-1863, and for each of the last Forty years.

Years.	Whole number		Living.		
	of Births.	Still-born.	Births.	Marriages.	Deaths.
1854-1863.....	38,042.....	1,471.....	36,571.....	14,943.....	24,230.....
1864.....	3,892.....	138.....	3,754.....	1,844.....	3,360.....
1865.....	3,955.....	177.....	3,778.....	1,896.....	3,405.....
1866.....	4,902.....	172.....	4,730.....	2,318.....	2,970.....
1867.....	5,127.....	163.....	4,964.....	2,344.....	2,889.....
1868.....	5,372.....	212.....	5,160.....	2,285.....	2,912.....
1869.....	5,245.....	220.....	5,025.....	2,289.....	3,382.....
1870.....	5,215.....	234.....	4,981.....	2,362.....	3,238.....
1871.....	5,678.....	223.....	5,455.....	2,336.....	3,344.....
1872.....	6,143.....	202.....	5,941.....	2,537.....	4,247.....
1873.....	6,022.....	228.....	5,794.....	2,630.....	4,403.....
1874.....	6,466.....	277.....	6,189.....	2,541.....	4,229.....
1875.....	6,508.....	246.....	6,262.....	2,485.....	4,317.....
1876.....	6,329.....	224.....	6,105.....	2,253.....	4,116.....
1877.....	6,235.....	242.....	5,993.....	2,282.....	4,450.....
1878.....	6,714.....	248.....	6,466.....	2,324.....	4,441.....
1879.....	6,350.....	216.....	6,134.....	2,396.....	4,472.....
1880.....	6,295.....	192.....	6,103.....	2,769.....	4,829.....
1881.....	6,761.....	264.....	6,497.....	2,750.....	5,016.....
1882.....	6,825.....	253.....	6,572.....	2,634.....	5,074.....
1883.....	7,046.....	253.....	6,793.....	2,611.....	5,282.....
1884.....	7,305.....	272.....	7,033.....	2,558.....	5,141.....
1885.....	7,028.....	271.....	6,757.....	2,488.....	5,389.....
1886.....	7,621.....	293.....	7,328.....	2,750.....	5,849.....
1887.....	7,668.....	276.....	7,392.....	2,839.....	6,340.....
1888.....	7,840.....	295.....	7,545.....	3,022.....	6,594.....
1889.....	8,220.....	329.....	7,891.....	3,029.....	6,259.....
1890.....	8,550.....	296.....	8,254.....	3,195.....	6,934.....
1891.....	9,426.....	272.....	9,154.....	3,320.....	6,620.....

TABLE XIII.—Concluded.

Years	Whole number		Living		
	of Births.	Still born.	Births.	Marriages.	Deaths.
1892.....	9,298.....	371.....	8,927.....	3,502.....	7,396.....
1893.....	10,048.....	412.....	9,636.....	3,544.....	7,440.....
1894.....	9,985.....	392.....	9,593.....	3,271.....	7,160.....
1895.....	10,249.....	367.....	9,882.....	3,497.....	7,535.....
1896.....	11,174.....	424.....	10,750.....	3,327.....	7,504.....
1897.....	11,218.....	423.....	10,795.....	3,137.....	7,110.....
1898.....	11,143.....	413.....	10,730.....	3,278.....	6,905.....
1899.....	11,220.....	389.....	10,831.....	3,433.....	7,458.....
1900.....	11,458.....	374.....	11,084.....	3,936.....	8,823.....
1901.....	11,761.....	469.....	11,292.....	3,846.....	7,966.....
1902.....	11,689.....	462.....	11,227.....	4,136.....	7,955.....
1903.....	12,287.....	506.....	11,781.....	4,473.....	8,642.....

During the period of fifty years there were recorded, in Rhode Island, 350,310 births, of which number 13,161 were still-born and 337,149 were living children.

During the same period there were recorded 129,410 marriages, or 258,820 persons married; and 245,626 deaths.

These results show that in every 26.7 births there was one still-born child, or that in every 1,000 births there were about 37 still-born and 963 living children.

The same results also show that the ratio of whole number of living births to the whole number of persons married, and to the whole number of decedents, respectively, during the same period, was as follows:

	Of		Of
	persons married.		Deaths.
For every 100 living births there were.....	76.8.....	and.....	72.9

The number of births in 1903 was 554 in excess of that of the previous year; the number of marriages greater by 337, or 674 more persons married; and there was an increase of 687 deaths.

For every 100 births there were:

	Of		Of
	persons married.		Deaths.
In 1899.....	63.4.....	and.....	68.9
In 1900.....	71.0.....	and.....	79.6
In 1901.....	68.1.....	and.....	70.5
In 1902.....	73.7.....	and.....	70.9
In 1903.....	75.9.....	and.....	73.4

TABLE XIV.

Comparative Exhibit of Births, Marriages, and Deaths in each Town in Rhode Island, in each of the Six Years 1898-1903, and Excess of Births over the Deaths in 1903.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.					MARRIAGES.					DEATHS.					Excess of Births over Deaths.					
	1899.		1900.		1901.		1902.		1903.		1899.		1900.		1901.		1902.		1903.		
	1898.						1898.						1898.								
Barrington.....	333	34	22	41	25	26	11	6	11	9	8	9	19	21	21	25	29	21	21	5	
Bristol.....	138	141	154	142	147	136	40	51	37	31	49	60	109	144	170	121	122	150	130	—14	
Warren.....	139	149	185	147	174	182	36	24	37	53	37	58	84	86	106	94	99	106	76	76	
Bristol County.....	310	324	361	330	346	344	87	81	85	93	94	127	212	251	297	240	250	277	67	67	
Coventry.....	137	148	133	160	158	160	18	20	26	25	27	23	81	92	105	114	96	99	61	61	
East Greenwich.....	39	49	18	41	56	30	31	36	17	25	23	28	53	63	70	56	52	60	—30	—30	
West Greenwich.....	7	8	12	9	7	11	.....	2	1	1	1	1	9	10	18	6	12	10	1	1
Warwick.....	798	742	713	758	707	724	156	181	191	206	217	193	373	409	515	425	385	401	323	323	
Kent County.....	981	947	876	971	928	925	205	239	235	257	268	245	516	574	708	601	545	570	355	355	
Jamestown.....	20	14	15	20	12	23	2	2	3	6	14	6	12	20	19	14	23	9	14	14	
Little Compton.....	17	31	21	25	41	20	7	8	5	5	6	3	17	18	27	19	16	16	4	4	
Middletown.....	25	31	33	34	26	35	3	4	1	3	9	5	15	21	22	14	16	17	18	18	
Newport City.....	577	594	599	576	537	526	150	161	206	165	178	201	349	391	423	386	424	359	167	167	
New Shoreham.....	20	21	13	13	17	18	10	8	10	13	8	8	17	23	33	14	20	24	—6	—6	
Portsmouth.....	36	43	37	54	43	46	6	13	14	6	11	8	28	38	34	31	33	39	7	7	
Tiverton.....	35	77	66	60	73	72	11	20	18	14	18	25	56	53	52	69	76	69	3	3	
Newport County...	730	811	784	782	749	740	189	216	257	212	244	256	494	564	610	547	608	533	207	207	

TABLE XIV.—Concluded.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS					MARRIAGES.					DEATHS.					Excess of Births over Deaths.			
	1898.	1899.	1900.	1901.	1902.	1903.	1898.	1899.	1900.	1901.	1902.	1903.	1898.	1899.	1900.		1901.	1902.	1903.
Burrillville.....	167	160	131	130	168	181	32	28	35	51	58	70	95	109	111	96	106	108	73
CENTRAL FALLS.....	563	556	610	516	545	607	148	138	161	154	152	164	218	254	352	300	287	339	268
Cranston*.....	227	208	280	286	285	294	69	64	66	47	82	62	172	155	188	194	186	226	68
Cumberland.....	238	254	236	238	214	223	62	48	60	83	65	81	146	149	154	143	151	143	80
East Providence.....	232	265	252	276	262	308	74	64	73	92	96	92	123	141	211	162	171	229	79
Foster.....	21	22	15	21	13	14	15	5	10	4	12	20	17	32	19	25	27	29	15
Glocester.....	23	24	23	23	28	35	7	9	11	7	5	9	27	36	32	30	25	39	4
Johnston.....	197	138	149	117	98	149	17	23	12	8	11	33	130	78	70	57	58	87	62
Lincoln.....	221	273	254	265	282	312	63	33	57	57	75	73	115	103	148	148	144	161	151
North Providence.....	67	55	59	43	60	66	4	1	6	6	4	3	35	35	42	46	50	49	17
North Smithfield.....	81	58	55	50	54	71	19	19	19	12	13	12	52	32	39	37	27	34	37
PAWTUCKET.....	1,067	970	1,025	1,019	959	1,034	270	318	418	375	366	444	543	635	792	667	737	664	370
PROVIDENCE CITY.....	4,256	4,293	4,503	4,696	4,719	4,935	1,566	1,670	1,900	1,875	2,041	2,238	2,929	3,162	3,678	3,444	3,394	3,895	1,040
Schodack.....	58	65	56	53	58	59	25	29	18	15	15	11	53	53	69	83	74	74	15
Smithfield.....	38	45	53	39	51	48	11	17	19	23	10	19	31	37	54	28	35	38	10
WOONSOCKET.....	808	842	960	988	1,006	1,006	228	262	283	287	305	294	458	533	556	479	546	489	517
PROVIDENCE COUNTY.	8,264	8,318	8,661	8,760	8,802	9,342	2,610	2,728	3,148	3,096	3,310	3,625	5,144	5,534	6,515	5,939	6,018	6,004	2,738
Charlestown.....	16	21	16	17	16	23	7	11	3	4	12	5	15	10	17	19	21	21	2
Exeter.....	10	9	8	4	3	6	15	9	9	7	7	7	13	11	18	15	5	10	4
Hopkinton.....	47	55	48	42	33	45	25	15	28	20	20	14	49	50	44	48	32	51	6
Narragansett.....	23	16	20	14	32	14	4	4	10	10	8	7	13	21	20	17	19	21	7
North Kingstown.....	74	50	68	75	66	73	26	28	26	28	39	25	63	62	72	52	52	65	8
South Kingstown.....	113	90	74	99	75	77	31	33	43	34	38	36	83	83	99	82	63	82	5
Richmond.....	17	20	25	23	19	18	8	6	4	7	7	7	24	30	28	26	27	29	11
Westerly.....	145	170	143	175	158	174	71	63	88	78	89	122	109	93	141	115	93	132	42
WASHINGTON COUNTY	445	431	402	449	402	430	187	169	211	188	220	220	369	360	439	394	312	411	19
STATE INSTITUTIONS.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	170	175	254	245	222	247	.....
WHOLE STATE.....	10,730	10,831	11,084	11,292	11,227	11,781	3,278	3,433	3,936	3,846	4,136	4,473	6,905	7,458	8,823	7,966	7,955	8,642	3,139

*Exclusive of Deaths in State Institutions.

The varying numbers of the events of births, marriages, and deaths occurring in the different towns during each of the six years ending December 31, 1903, are very concisely presented in Table XIV, and a ready means is thereby afforded of comparing and studying the changes in the vital movements of the people in the different precincts during those years.

The actual increase of population in the State, for the ten years 1890 to 1900, was 83,048, or 24.0 per cent., or an annual average of two and four-tenths per cent. The increase by immigration must have been nearly twice as large as the natural increase.

TABLE XV.

Births, Marriages, and Deaths in Rhode Island, in 1903, with the number and ratio of each in every 1,000 of the population of each town, and the ratio of excess of the births over the deaths in every 1,000 of the population.

TOWNS AND DIVISIONS OF THE STATE.	Population in 1903, geometrically esti- mated.	Births.	Births per 1,000 of the population.	Marriages.	Persons married per 1,000 of population.	Deaths.	Deaths per 1,000 of population.	Excess of Births per 1,000.
Barrington.....	1,068	26	24.3	9	16.9	21	19.7	4.6
Bristol.....	7,505	135	18.1	60	16.0	150	20.0	-1.9
Warren.....	5,389	182	33.8	58	21.5	106	19.7	14.1
BRISTOL COUNTY.....	13,962	344	24.6	127	18.2	277	19.8	4.8
Coventry.....	5,403	160	29.6	23	8.5	99	18.3	11.3
East Greenwich.....	2,707	30	11.1	28	20.7	60	22.2	-11.1
West Greenwich.....	564	11	19.5	1	3.5	10	17.7	1.8
Warwick.....	22,922	724	31.6	193	16.8	401	17.5	14.1
KENT COUNTY.....	31,596	925	29.3	245	15.5	570	18.0	11.3
Jamestown.....	1,907	23	12.1	6	6.3	9	4.7	7.4
Little Compton.....	1,151	20	17.4	3	5.2	16	13.9	3.5
Middletown.....	1,565	35	22.4	5	6.4	17	10.9	11.5
NEWPORT CITY.....	23,233	526	22.6	201	17.3	359	15.5	7.1
New Shoreham.....	1,443	18	12.5	8	11.1	24	16.6	-4.1
Portsmouth.....	2,188	46	21.0	8	7.3	39	17.8	3.2
Tiverton.....	3,068	72	23.5	25	16.3	69	22.5	1.0
NEWPORT COUNTY.....	34,557	740	21.4	256	14.8	533	15.4	6.0
Burrillville.....	6,730	181	26.9	70	20.8	108	16.0	10.9
CENTRAL FALLS.....	18,803	607	32.3	164	17.4	339	18.0	14.3
Cranston*.....	13,364	294	22.0	62	9.3	226	16.9	5.1
Cumberland.....	9,392	223	23.7	81	17.2	143	15.2	8.5
East Providence.....	13,791	308	22.3	92	13.3	229	16.6	5.7
Foster.....	1,148	14	12.1	20	34.8	29	25.3	-13.2
Glocester.....	1,340	35	26.1	9	13.4	39	29.1	-3.0
Johnston.....	5,282	149	28.2	33	12.5	87	16.5	11.7
Lincoln.....	9,495	312	32.8	73	15.4	161	16.9	15.9
North Providence.....	3,443	66	19.2	3	1.7	49	14.2	5.0
North Smithfield.....	2,283	71	31.1	12	10.5	34	14.9	16.2
PAWTUCKET.....	44,784	1,034	23.1	444	19.8	664	14.8	8.3
PROVIDENCE CITY.....	191,937	4,935	25.7	2,238	23.3	3,895	20.3	5.4
Scituate.....	3,493	59	16.9	11	6.3	74	21.2	-4.3
Smithfield.....	2,045	48	23.5	19	18.6	38	18.6	4.9
Woonsocket.....	31,536	1,006	31.9	294	18.6	489	15.5	16.4
PROVIDENCE COUNTY.....	358,866	9,342	26.0	3,625	20.2	6,604	18.4	7.6
Charlestown.....	1,011	23	22.7	5	9.9	21	20.8	1.9
Exeter.....	822	6	7.3	7	17.0	10	12.2	-4.9
Hopkinton.....	2,572	45	17.5	14	10.9	51	19.8	-2.3
Narragansett.....	1,586	14	8.8	7	8.8	21	13.2	-4.4
North Kingstown.....	4,069	73	17.9	25	12.3	65	16.0	1.9
South Kingstown.....	5,324	77	14.4	36	13.5	82	15.4	-1.0
Richmond.....	1,485	18	12.1	4	5.4	29	19.5	-7.4
Westerly.....	7,908	174	22.0	122	30.9	132	16.7	5.3
WASHINGTON COUNTY.....	24,777	430	17.4	220	17.8	411	16.6	0.8
STATE INSTITUTIONS.....	2,452	.....	.....	.....	.....	247	100.7	.....
WHOLE STATE.....	466,210	11,781	25.3	4,473	19.2	8,642	18.5	6.8

* Not including State Institutions.

In Table XV, on the preceding page, may be found the varying proportions of the number of births, marriages, and deaths to every 1,000 of the population in the various towns and cities in the State, as they occurred in 1903.

BIRTHS.

Proportion to Population.

In regard to births, the extreme range of proportion to population was from 7.3 in every 1,000, in Exeter, to 33.8 in Warren. Following Warren, in the line of largest proportion, are Lincoln, with 32.8; Central Falls, with 32.3; and Woonsocket, with 31.9. Following Exeter, in the line of smallest proportion of births to population, are Narragansett, with 8.8 in every 1,000; East Greenwich, with 11.1; and Jamestown, Foster, and Richmond, each with 12.1.

The proportions of births to population, in all the counties entire, and in the cities of Central Falls, Newport, Pawtucket, Providence, Woonsocket, and the whole State, during the last seven years, are as follows:

BIRTHS TO EVERY 1,000 PERSONS.

	1903.	1902.	1901.	1900.	1899.	1898.	1897.
Bristol County.....	24.6	25.5	24.6	27.5	22.7	22.0	27.1
Kent County.....	29.3	30.1	31.9	29.2	27.8	29.6	28.0
Newport County.....	21.4	22.2	23.5	24.0	24.2	22.9	22.8
Newport City.....	22.6	23.7	25.7	27.2	26.7	26.1	25.4
Providence County.....	26.0	25.7	26.2	26.5	26.4	26.8	27.9
Central Falls.....	32.3	28.8	27.8	33.6	31.0	32.2	30.2
Pawtucket.....	23.1	23.2	25.2	26.1	26.1	29.5	28.3
Providence City.....	25.7	25.3	26.0	25.6	25.9	27.6	27.2
Woonsocket.....	31.9	34.1	33.9	34.0	29.5	29.3	32.5
Washington County.....	17.4	16.5	18.5	16.6	16.8	17.5	18.5
Whole State.....	25.3	25.1	25.8	25.9	25.6	25.9	26.8

PERSONS MARRIED.

Proportion to Population.

The proportion to the population, of persons married, can be more correctly shown in counties, or in cities and aggregates of towns, than in single towns.

The following summary will present the proportions in the manner suggested, for the last seven years:

PERSONS MARRIED IN EVERY 1,000.

	1903.	1902.	1901.	1900.	1899.	1898.	1897.
Bristol County.....	18.2	13.8	13.9	12.9	11.3	12.3	13.5
Kent County.....	15.5	17.4	16.9	15.7	14.0	12.4	10.7
Newport County.....	14.8	14.5	12.8	15.8	13.5	11.9	13.1
Newport City.....	17.3	15.7	14.7	18.7	14.5	13.6	14.1
Providence County..	20.2	19.3	18.5	19.3	17.3	17.0	16.5
Central Falls.....	17.4	16.1	16.6	17.7	15.4	16.9	14.1
Pawtucket.....	19.8	17.7	18.5	21.3	17.1	14.9	16.7
Providence City....	23.3	21.9	20.8	21.6	20.1	20.3	27.2
Woonsocket.....	18.6	20.7	19.8	20.0	18.3	16.5	32.5
Washington County..	17.8	18.0	15.5	17.5	13.2	14.7	18.5
Whole State.....	19.2	18.5	17.6	18.4	16.2	15.8	26.8

DEATHS.

Proportion to Population.

The number of deaths, in proportion to the living population, varies considerably from year to year in the different towns. The smaller the towns the greater generally is the annual variation.

The highest rate occurred in Glocester, that is, 29.1 in every 1,000 of the population; followed by Foster, 25.3, and Tiverton, 22.5.

The lowest death rate was in Jamestown, that is, 4.7 in every 1,000 of the population; followed by Middletown, with 10.9, and Exeter, 12.2.

The following summary will give the ratios of mortality to the population in the cities and counties of the State, during the seven years ending December 31, 1903:

DEATHS IN EVERY 1,000 OF POPULATION.

	1903.	1902.	1901.	1900.	1899.	1898.	1897.
Bristol County.....	19.8	18.4	17.9	22.6	17.6	15.0	18.6
Kent County.....	18.0	17.7	19.7	23.6	16.8	15.6	16.7
Newport County.....	15.4	18.1	16.5	18.7	17.6	15.5	16.2
Newport City.....	15.5	18.7	17.2	19.2	17.6	15.8	16.9
Central Falls.....	18.0	15.2	16.1	19.4	14.1	12.5	13.2
Pawtucket.....	14.8	17.8	16.5	20.2	14.4	15.0	17.7
Providence City....	20.3	18.2	19.1	20.9	19.1	12.5	18.6
Woonsocket.....	15.5	18.5	16.5	19.7	18.6	16.6	17.5
Providence County..	18.4	17.6	17.8	19.9	17.6	16.7	17.6
Washington County..	16.6	12.8	16.2	18.2	14.1	14.5	14.7
Whole State.....	18.5	17.8	18.2	20.6	17.6	16.7	17.6

TABLE XVI.

Proportion of Births, Marriages, and Deaths to the Population, in the Whole State, in each of the last thirty-five years.

YEARS.	Popu- lation.	BIRTHS.		MARRIAGES.		DEATHS.		
		Number.	Of popu- lation, one birth in every	Number.	Of popu- lation, one per- son mar- ried in every	Number.	Of popu- lation, one death in every	Deaths in every 1,000 of the popu- lation.
1869	211,380	5,245	40.3	2,289	46.2	3,382	62.5	16.0
1870	218,555	5,215	41.9	2,362	46.2	3,238	67.5	14.8
1871	225,968	5,676	39.8	2,336	48.4	3,344	67.6	14.8
1872	233,637	6,143	38.0	2,537	46.0	4,247	55.0	18.2
1873	241,561	6,022	40.1	2,630	45.9	4,403	54.8	18.2
1874	249,765	6,466	38.6	2,541	49.1	4,229	50.0	16.9
1875	258,239	6,508	39.7	2,485	52.0	4,317	59.8	16.7
1876	262,513	6,329	41.5	2,253	58.3	4,116	63.8	15.7
1877	266,850	6,235	42.8	2,282	58.4	4,450	60.0	16.7
1878	271,269	6,714	40.4	2,324	58.4	4,441	61.1	16.4
1879	275,753	6,350	43.4	2,396	57.5	4,472	61.7	16.2
1888	280,319	6,295	44.5	2,769	50.6	4,829	58.0	17.2
1881	284,960	6,761	42.1	2,750	51.8	5,016	56.8	17.6
1882	289,667	6,825	42.4	2,634	55.0	5,074	57.1	17.5
1883	294,460	7,046	41.8	2,611	56.4	5,282	55.7	17.9
1884	299,329	7,305	41.0	2,558	58.5	5,141	58.2	17.2
1885	304,284	7,028	43.3	2,488	61.2	5,389	56.5	17.7
1886	311,507	7,621	40.9	2,750	56.6	5,848	53.3	18.8
1887	318,907	7,668	41.6	2,839	56.2	6,340	50.3	19.9
1888	326,477	7,840	41.6	3,022	54.0	6,594	49.5	20.2
1889	334,223	8,220	40.7	3,029	55.2	6,259	53.4	18.7
1890	342,169	8,550	40.0	3,195	53.5	6,934	49.3	20.3
1891	350,292	9,426	37.2	3,320	52.8	6,620	52.9	18.9
1892	358,308	9,270	38.7	3,502	51.2	7,396	48.5	20.6
1893	367,125	10,048	36.5	3,544	51.9	7,440	49.3	20.2
1894	375,836	9,985	37.6	3,271	57.4	7,160	52.5	19.1
1895	384,758	9,882	38.9	3,497	55.0	7,535	51.1	19.6
1896	393,891	10,750	36.6	3,327	59.2	7,504	52.5	19.1
1897	403,245	10,795	37.4	3,137	64.3	7,110	56.7	17.6
1898	414,413	10,730	38.6	3,278	65.2	6,905	60.0	16.7
1899	422,620	10,831	39.0	3,433	61.5	7,458	56.7	17.6
1900	428,556	11,084	38.7	3,936	54.4	8,823	48.6	20.6
1901	437,888	11,292	38.8	3,846	56.9	7,966	55.0	18.2
1902	447,422	11,227	39.9	4,136	54.1	7,955	56.2	17.8
1903	466,210	11,781	25.3	4,473	52.1	8,642	53.9	18.5

During the ten years 1869-1878, the average annual birth rate was one birth to every 40.3 of the population, or 24.8 births in every 1,000; during the ten years 1879-1888, the average birth rate was one birth in every 42.2 of the population, or 23.7 in every 1,000, a falling off of a fraction over one birth in every 1,000 of the population.

From 1894 to 1903 the average annual birth rate was one birth in every 38.5 of the population, or 26.0 in every 1,000.

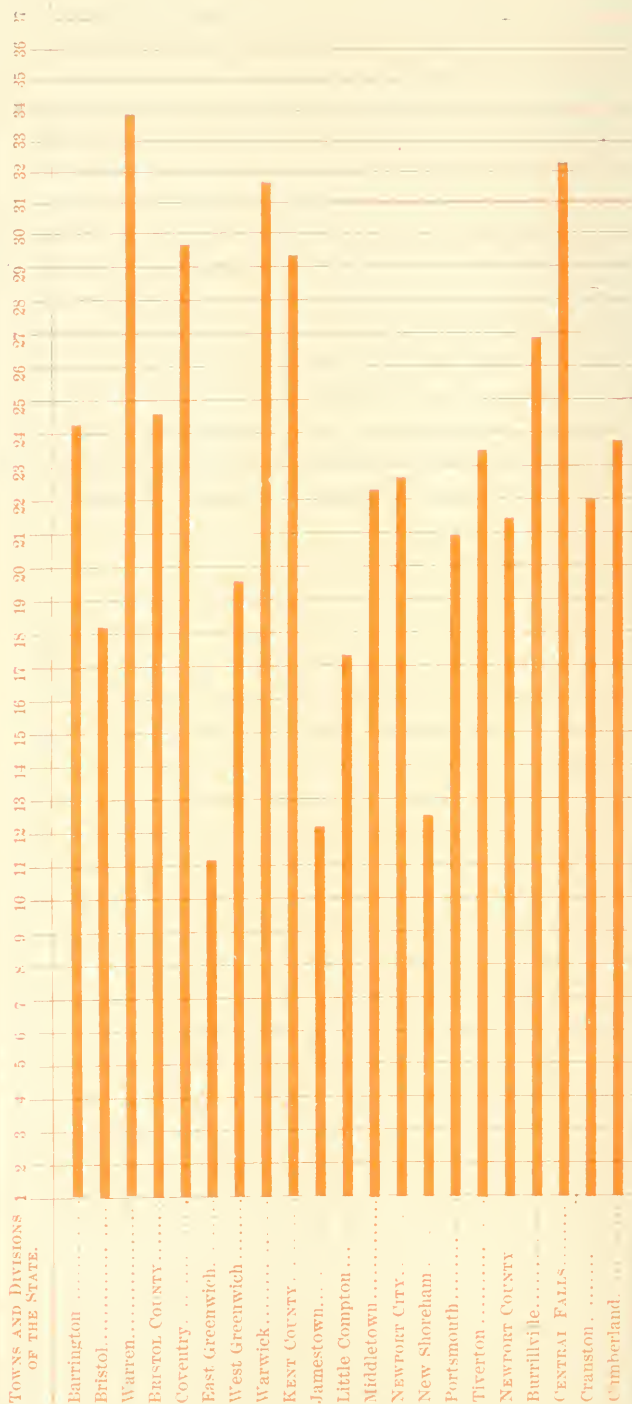
During the period of ten years 1869-1878, the average annual death rate was one in every 60.7 of the population, or 16.5 in every 1,000, according to the returns. During the ten years 1879-1888, the average annual death rate was one in every 55.3 of the population, or 18.1 in every 1,000 of the living. From 1894 to 1903, the average annual death rate was one in every 54.2 of the population, or 18.5 in every 1,000 of the living.

It must be remembered, however, that the returns during the last ten years have been more complete than in previous years.

BIRTH RATES

Diagram I.—Showing the Number of Births in every 1,000 of the Population, in each Town and each County in the State during the Year computed upon an estimated increase of the Population by the Census of 1900

For explanation see foot-note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of births during the year in every 1,000 persons. The space between the parts of one. For instance, the heavy horizontal line against Barrington, at the top of this diagram, reaches across three-tenths of the space between the perpendicular lines 24 and 25. It shows the birth rate of Barrington in 1893, was twenty four and three tenths in every 1,000 of the population

BIRTHS, 1903.

The general statistics of births in Rhode Island, during the year 1903, derived from the returns sent to the office of the State Registrar, may be found on pages 2 to 8, inclusive, in Tables I, II, and III.

The whole number reported is 11,781, as before stated, and is 554 larger than the number in 1902.

SEX OF THE CHILDREN.

Of the 11,781 children whose births were registered in 1903 there were 5,975 males and 5,806 females. This gives 103 males to each 100 females, or 507.2 males and 492.8 females in each 1,000 children.

The following table shows the number and sex, and the proportions of each sex, of the children born in Rhode Island, during the ten years 1854-1863, and in each of the last forty years:

TABLE XVII.

Years.	Males.	Females.	Males to each	Per 1 000
			100 Females.	Births. Males. Females.
1854-1863	19,386	18,686	103.6, or	508.8 and 491.2
1864	1,949	1,942	100.3, or	500.9 and 499.1
1865	2,096	1,857	112.9, or	530.2 and 469.8
1866	2,546	2,356	108.0, or	519.4 and 480.6
1867	2,665	2,464	107.0, or	518.7 and 481.3
1868	2,745	2,627	104.5, or	511.0 and 489.0
1869	2,685	2,560	104.9, or	511.9 and 488.1
1870	2,679	2,536	105.6, or	513.7 and 486.3
1871	2,878	2,800	102.8, or	506.9 and 493.1
1872	3,085	3,058	100.8, or	502.2 and 497.8
1873	3,135	2,887	108.6, or	520.6 and 479.4
1874	3,311	3,155	104.9, or	512.1 and 487.9
1875	3,362	3,146	106.9, or	516.6 and 483.4
1876	3,291	3,038	108.3, or	520.0 and 480.0
1877	3,163	3,072	103.0, or	507.3 and 492.7
1878	3,402	3,312	102.7, or	506.7 and 493.3
1879	3,259	3,091	102.4, or	513.2 and 486.8
1880	3,241	3,054	106.8, or	514.8 and 485.2
1881	3,498	3,263	107.2, or	517.3 and 482.7
1882	3,509	3,316	105.8, or	514.1 and 485.9
1883	3,548	3,498	101.4, or	503.5 and 496.5
1884	3,713	3,592	103.4, or	508.3 and 491.7
1885	3,591	3,437	104.4, or	510.3 and 489.7
1886	3,897	3,724	104.6, or	511.3 and 488.7
1887	3,968	3,700	107.2, or	517.5 and 482.5
1888	4,023	3,817	105.4, or	513.1 and 486.9
1889	4,193	4,027	104.1, or	510.0 and 490.0
1890	4,351	4,199	103.5, or	508.8 and 491.2

TABLE XVII.—Concluded.

Years.	Males.	Females.	Males to each 100 Females.		Per 1,000 Births.	
					Males.	Females.
1891.....	4,926..	4,500..	109.5, or.....		522.6 and 477.4	
1892.....	4,765..	4,505..	105.8, or.....		514.1 and 485.9	
1893.....	5,105..	4,943..	103.3, or.....		508.1 and 491.9	
1894.....	5,129..	4,856..	105.6, or.....		513.7 and 486.3	
1895.....	5,136..	4,746..	108.2, or.....		519.7 and 480.3	
1896.....	5,461..	5,289..	103.3, or.....		508.0 and 492.0	
1897.....	5,493..	5,302..	103.6, or.....		508.8 and 491.2	
1898.....	5,443..	5,287..	102.9, or.....		507.3 and 492.7	
1899.....	5,591..	5,240..	106.7, or.....		516.2 and 483.8	
1900.....	5,625..	5,459..	103.0, or.....		507.5 and 492.5	
1901.....	5,944..	5,348..	111.1, or.....		526.4 and 473.6	
1902.....	5,776..	5,451..	106.0, or.....		514.5 and 485.5	
1903.....	5,975..	5,806..	102.9, or.....		507.2 and 492.8	

The average proportion for fifty years is 105.0 males to every 100 females. At the end of five years from birth the number of each sex is about equal, the males having a larger mortality during that period.

PROPORTION OF THE SEXES. *Localities.*

In Table II, on pages 6 and 7, will be found the number of children born in the different divisions of the State during the year 1903, together with the number of each sex.

The following table will give more concisely the whole number of children born, arranged according to sex and locality, and the proportion of male children to every 100 female children:

TABLE XVIII.

BIRTHS, 1903.	Bristol County.	Kent County.	Newport County.	Providence County Towns.	Washington County.	Newport City.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Whole State.
Males.....	179	443	120	912	216	260	309	520	2,525	491	5,975
Females.....	165	482	94	848	214	266	298	514	2,410	515	5,806
Total.....	344	925	214	1,760	430	526	607	1,034	4,935	1,006	11,781
Males to each 100 fe- males.....	108.5	91.9	127.7	107.5	100.9	97.7	103.7	101.2	104.8	95.3	102.9

Compared with the previous year, the decrease in the proportion of male births in the whole State was 3.1 per cent.

The following table exhibits the proportions of births of the sexes for the past forty years in the larger divisions of the State and in the whole State:

TABLE XIX.

Number of Males to each 100 Females.

BIRTHS.	Bristol County.	Kent County.	Newport County.*	Providence County, Towns.†	Providence City.	Washington County.	Whole State.
1863.	120.0	98.4	97.0	101.8	111.4	108.7	105.8
1864.	106.8	87.3	90.6	107.4	97.3	103.4	100.3
1865.	119.3	118.2	108.8	118.8	113.8	88.1	112.9
1866.	109.4	113.1	103.4	104.9	108.4	124.0	108.7
1867.	115.5	98.3	117.8	106.3	104.5	120.4	107.7
1868.	117.4	88.7	100.2	101.6	102.4	136.5	104.5
1869.	115.7	116.7	102.7	98.0	107.5	120.6	104.9
1870.	126.4	111.6	100.0	105.1	104.9	99.5	105.6
1871.	131.8	97.9	132.5	100.8	95.2	113.3	102.8
1872.	109.2	92.8	109.1	103.5	95.7	110.6	100.9
1873.	129.2	113.0	117.9	104.5	109.0	104.7	108.6
1874.	98.7	111.9	101.3	110.4	102.9	94.0	104.9
1875.	95.2	103.1	97.7	104.3	109.1	134.3	106.9
1876.	142.1	104.4	108.5	108.0	106.8	103.7	108.3
1877.	138.7	102.4	98.5	100.3	104.9	95.3	103.0
1878.	120.5	120.6	94.8	101.5	106.8	78.8	102.7
1879.	124.3	95.5	103.6	105.4	105.7	106.3	105.4
1880.	117.2	110.5	113.5	102.4	107.6	95.4	106.1
1881.	91.2	111.3	102.0	105.9	109.0	115.7	107.2
1882.	94.7	110.2	112.5	103.1	106.5	105.7	105.8
1883.	94.0	97.6	97.0	103.5	102.2	102.2	101.4
1884.	105.0	111.7	92.9	102.5	105.8	99.0	103.4
1885.	132.2	107.3	98.0	104.8	103.6	104.3	104.4
1886.	120.0	81.7	102.6	106.7	105.0	121.7	104.6
1887.	115.1	121.7	106.6	103.9	107.9	106.7	107.2
1888.	98.1	105.1	105.0	103.4	107.4	110.2	105.4
1889.	81.9	122.0	107.5	103.6	101.4	110.2	104.1
1890.	96.5	113.0	106.8	108.5	98.3	97.4	103.6
1891.	107.1	110.4	118.4	107.0	109.1	106.4	109.5
1892.	120.0	102.1	102.4	110.7	100.0	98.5	105.8
1893.	90.7	101.8	97.7	104.1	104.1	109.0	105.8
1894.	103.4	102.4	121.1	110.0	99.6	106.5	105.6
1895.	118.4	116.3	100.8	105.0	109.6	115.6	108.2
1896.	96.5	95.4	103.7	102.4	105.8	108.5	103.3
1897.	101.2	108.4	97.5	103.9	104.4	96.2	103.6
1898.	96.2	104.4	98.9	101.6	105.2	102.3	102.9
1899.	121.9	103.2	114.0	106.8	102.9	129.2	106.7
1900.	114.9	100.9	113.0	99.3	104.5	102.0	103.0
1901.	132.4	116.7	117.8	111.0	112.2	96.1	111.1
1902.	96.6	110.0	109.8	112.2	100.5	102.0	106.0
1903.	108.5	91.9	105.6	102.6	104.8	100.9	102.9

*Including city of Newport. †Including cities of Central Falls, Pawtucket, and Woonsocket.

There will be found in the following summary, in the aggregate, the average number of males to each 100 females, born during the forty-one years from 1863-1903, in the different divisions of the State:

Bristol County.....	111.5 males to each 100 females.
Kent County.....	108.2 males to each 100 females.
Newport County*.....	108.2 males to each 100 females.
Providence County Townsh.	107.7 males to each 100 females.
Providence City.....	107.5 males to each 100 females.
Washington County.....	109.6 males to each 100 females.
Whole State.....	108.0 males to each 100 females

BIRTHS AND SEASON.

Table II, on pages 6 and 7 of this report, gives the number of births occurring in the different months of the year, in the several divisions of the State.

According to this table, the greatest number of births in any one month, in 1903, occurred in July, and the largest in any quarter in the third.

The following table shows the total number of children born in the State of Rhode Island, according to the returns, in each quarter of each of the last six years; and also the aggregate number and the percentage of the aggregate of each quarter in fifty years, from 1854 to 1903, inclusive:

TABLE XX.

QUARTERS.	1903.	1902.	1901.	1900.	1899.	1898.	1854-1903, inclusive.	
							Number.	Per cent.
January—March.....	2,967	2,758	2,751	2,736	2,693	2,686	82,749	23.88
April—June.....	2,723	2,628	2,612	2,581	2,549	2,562	81,697	23.58
July—September.....	3,052	2,937	3,010	2,921	2,791	2,802	90,754	26.20
October—December.	3 039	2,904	2,919	2,846	2,798	2,680	91,255	26.34
Whole Year.....	11,781	11,227	11,292	11,084	10,831	10,730	346,455	100.00

Table XX presents results showing that, according to the registration of fifty years, the average proportions of births to the

*Including city of Newport. †Including cities of Central Falls, Pawtucket, and Woonsocket.

whole number of births in the different quarters of the year were as follows:

January—March.....	238.8 in every 1,000 births.
April—June.....	235.8 in every 1,000 births.
July—September.....	262.0 in every 1,000 births.
October—December.....	263.4 in every 1,000 births.

The proportions of births in Rhode Island, in the different quarters of the year, to the whole number of births in 1903, were as follows:

1. January—March.....	25.2 per cent., or.....	252 in every 1,000
2. April—June.....	23.1 per cent., or.....	231 in every 1,000
3. July—September.....	25.9 per cent., or.....	259 in every 1,000
4. October—December.....	25.8 per cent., or.....	258 in every 1,000

First six months.....483 births in every 1,000 of whole number.

Second six months.....517 births in every 1,000 of whole number.

BIRTHS. *Sex and Season.*

In Table II, on pages 6 and 7, will also be found the number of births of *each sex* by months, as they occurred in the different divisions of the State, during the year 1903. From it we ascertain the number of *each of the sexes* born during each quarter of the year, with their relative proportions, and also the aggregates and proportions of the same for the whole State.

The following table will present a summary of the quarterly periods, number of births, and proportions of the sexes, for the same year:

	Males to each		Per 1,000	
	100		each quarter.	
	Males.	Females.	Females.	Males. Females.
1. January—March.....	1,540.....	1,427.....	107.9.....	519.....481
2. April—June.....	1,378.....	1,345.....	102.5.....	506.....494
3. July—September.....	1,508.....	1,544.....	97.7.....	494.....506
4. October—December.....	1,549.....	1,490.....	104.0.....	510.....490
Whole Year.....	5,975.....	5,806.....	102.9.....	507.....493

The following table shows the number of male children born to every 100 female children, in each quarter of the last three years; and also the proportion of births of male children to each 100 female children born during seven periods of five years each, from 1866 to 1900, inclusive:

TABLE XXI.

YEARS.	1903.	1902.	1901.	5 years, 1896 to 1900.	5 years, 1891 to 1895.	5 years, 1886 to 1890.	5 years, 1881 to 1885.	5 years, 1876 to 1880.	5 years, 1871 to 1875.	5 years, 1866 to 1870.
First Quarter...	107.9	104.3	111.4	103.8	104.6	104.3	105.8	106.0	101.5	106.6
Second Quarter	102.5	109.2	110.5	105.1	107.3	105.4	104.8	102.7	104.7	107.3
Third Quarter.	97.7	103.1	110.3	102.8	108.6	104.6	105.1	107.1	104.8	106.0
Fourth Quarter	104.0	107.6	112.3	104.2	105.8	106.5	102.5	108.2	106.5	104.8
Total Average.	102.9	106.0	111.1	103.9	106.5	105.2	104.5	106.2	104.2	106.2

The above table shows the variation of the proportions of the sexes in the different quarters in the different years, and seems to conclusively determine that season has very little, if any, influence in the causation of sex.

PARENTAGE.

By reference to Table I, page 4, in the division of births, there will be found the parentage of the children born in Rhode Island during the year 1903. It will be seen that of the whole number, 11,781, there were 3,605 of native, 5,914 foreign, and 2,262 of mixed parentage.

By mixed parentage is meant the children born of native fathers and foreign mothers, and of foreign fathers and native mothers.

Of native fathers and foreign mothers there were 1,104, and of foreign fathers and native mothers, 1,158.

The following table will show the number and parentage of the children born in the State and the variations of the same from year to year, in each of the last three years; and also the number and variations occurring in three periods of five years each and three of ten years each, from 1858 to 1902, inclusive:

TABLE XXII.

PARENTAGE.	1903.	1902.	1901.	5 years, 1898 to 1902.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	10 years, 1878 to 1887.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native father and mother.....	3,605	3,414	3,426	16,931	16,762	16,511	29,170	23,645	20,321
Foreign father and mother.....	5,914	5,555	5,629	27,485	25,084	18,737	28,807	26,356	19,665
Native father, foreign mother.....	1,104	1,111	1,063	5,297	4,819	4,021	5,371	3,135	1,690
Foreign father, native mother.....	1,158	1,147	1,174	5,451	4,795	4,039	6,265	4,077	1,696
Parentage not stated.....									293
Total.....	11,781	11,227	11,292	55,164	51,460	43,306	69,613	59,213	43,665

The following table of *percentages* will show, in a different and perhaps clearer way, the same changes that have occurred in the proportions of the births in the different classes of parentage during the last three years, and during forty-five years, from 1858 to 1902, inclusive, in three periods of five years each, and three of ten years:

TABLE XXIII.

PARENTAGE.	1903.	1902.	1901.	5 years, 1898 to 1902.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	10 years, 1878 to 1887.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native father and mother.....	30.60	30.41	30.34	30.68	32.60	38.25	41.97	43.36	46.84
Foreign father and mother.....	50.20	49.48	49.85	49.83	48.73	43.14	41.40	44.53	45.36
Native father, for- eign mother.....	9.37	9.89	9.41	9.60	9.36	9.30	7.63	5.37	3.89
Foreign father, na- tive mother.....	9.83	10.22	10.40	9.87	9.31	9.31	9.00	6.74	3.91
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

The registration of births, in 1903, is of interest as continuing to show, as usual, a smaller proportion of children born of native fathers than of foreign fathers. A considerable number of those recorded as native fathers were themselves children of foreign parents.

The percentage of children of mixed parentage was about the same, in 1902, as in the previous year.

The following table will present the percentages of children of native and foreign-born fathers, and of native and foreign-born mothers, respectively, in each of the last three years, and in each of three periods of five years each and three of ten years each, from 1858 to 1902, inclusive:

TABLE XXIV.

CHILDREN WITH	1903.	1902.	1901.	5 years, 1898 to 1902.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	10 years, 1878 to 1887.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native fathers.....	39.97	40.30	39.75	40.30	41.96	47.56	49.65	48.73	50.73
Foreign fathers ..	60.03	59.70	60.25	59.70	58.04	52.44	50.35	51.27	49.26
Native mothers.....	40.43	40.63	40.74	40.57	41.91	47.57	50.85	50.10	50.75
Foreign mothers....	59.57	59.37	59.26	59.43	58.09	52.43	49.15	49.90	49.25

The number of native fathers of children born, in 1903, was 2,363 less than the number of foreign fathers, and the number of native mothers was 2,255 less than of foreign.

BIRTHS OF COLORED CHILDREN.

The number of births of children of colored parentage reported for the year 1903 is 208. This number is 3 less than in 1902, and also 44 less than in 1900.

In regard to sex, the numbers and proportions were as follows, viz.: 108 males to 100 females.

As the number of colored persons in the State was, according to the census of 1900, 9,125,* the ratio of births in this class would be 22.8 per thousand, or 1 to each 43.9 colored inhabitants.

The following summary will show the changes that have occurred from year to year, in the proportions of the sexes of colored children born in Rhode Island, during the last twenty-eight years:

Years.	Whole Number.	Males.	Females.	Males to each 100 Females.
				Females.
1876-1885.	1,762..	849....	913....	93.0
1886....	212..	117....	95....	123.0
1887....	211..	111....	100....	111.0
1888....	202..	109....	93....	117.2
1889....	194..	87....	107....	81.3
1890....	183..	89....	94....	94.6
1891....	173..	86....	87....	98.9
1892....	182..	94....	88....	106.8
1893....	203..	91....	112....	81.3
1894....	221..	113....	108....	104.6
1895....	221..	117....	104....	112.5
1896....	226..	104....	122....	85.2
1897....	206..	100....	106....	94.3
1898....	216..	105....	111....	94.6
1899....	201..	105....	96....	109.4
1900....	231..	120....	111....	108.1
1901....	252..	125....	127....	98.4
1902....	211..	108....	103....	104.9
1903....	208..	108....	100....	108.0

The following table will show the location, number, sex, etc., of colored births during 1903:

* This does not include Chinese or Japanese.

TABLE XXV.

Showing Number, Sex, etc., of Colored Births, 1903

TOWNS AND CITIES.	Whole Number.	Males.	Females.	COUNTIES
Bristol.....	1	1	Bristol County..... 1
East Greenwich.....	6	2	4	Kent County..... 8
Warwick	2	2	.....
Jamestown.....	2	1	1	Newport County.... 39
Middletown.....	1	.....	1
NEWPORT CITY.....	34	17	17	
Portsmouth.....	2	.....	2
.....	
CENTRAL FALLS.....	1	1	Providence County. 142
Cranston.....	3	1	2	
East Providence.....	10	6	4	
Lincoln.....	1	1	.....
PAWTUCKET.....	5	3	2	
PROVIDENCE CITY.....	122	66	56	
.....	
Charlestown.....	3	3	Washington County. 18
Hopkinton.....	1	.....	1
Narragansett.....	1	1	.....
South Kingstown.....	7	4	3	
Richmond.....	2	1	1	
Westerly.....	4	1	3	
.....	
WHOLE STATE.....	208	108	100 208

NUMBER OF CHILD OF THE MOTHER.

In the following table will be found the number of the child of the mother born during 1903, that is, how many of the children born were reported as the first, second, or third child, etc., of their respective mothers. The statistics on this subject begin with the year 1857, and the following table includes the children reported during the last six years, and also the total for forty-seven years, 1857 to 1903 inclusive:

TABLE XXVI.

NUMBER OF THE CHILD OF THE MOTHER.	1898.	1899.	1900.	1901.	1902.	1903.	47 years, 1857-1903.
First.....	2,393	2,426	2,640	2,851	2,819	3,056	84,663
Second.....	2,059	2,089	1,977	2,179	2,103	2,264	65,892
Third.....	1,631	1,635	1,616	1,589	1,503	1,707	50,916
Fourth.....	1,310	1,286	1,342	1,265	1,291	1,240	38,774
Fifth.....	982	942	978	972	1,010	961	29,015
Sixth.....	715	753	771	724	729	792	21,474
Seventh.....	532	544	531	528	553	556	15,423
Eighth.....	378	382	378	392	383	382	10,955
Ninth.....	231	238	289	247	274	254	7,432
Tenth.....	180	176	199	179	171	193	5,093
Eleventh.....	105	130	125	128	124	118	3,224
Twelfth.....	80	86	82	79	83	110	2,118
Thirteenth.....	54	58	63	53	56	42	1,247
Fourteenth.....	33	39	34	35	44	31	700
Fifteenth.....	10	12	24	16	22	24	370
Sixteenth.....	5	7	7	10	9	5	180
Seventeenth.....	8	4	2	4	2	6	98
Eighteenth.....			1	3	3	1	43
Nineteenth.....	3	1	1		3		29
Twentieth.....		1	1	1			11
Twenty-first.....		1		2	2		9
Twenty-second.....		1	1				4
Unstated.....	21	20	22	35	43	39	493
Total....	10,730	10,831	11,084	11,292	11,227	11,781	335,163

There was an increase, in 1903, of 554 over the number of births in 1902.

There are varying differences in the proportions of all classes in the different years.

The proportion of each class to the whole number will be shown by the following table, which gives the percentage of the children born in each of the last four years who were respectively the first, second, third, etc., children of the mothers; and which will also give the average percentage of each class of births in each of the last four

years, and also in two periods of ten years, and three periods of five years, comprising the thirty-five years from 1868 to 1902, inclusive:

NUMBER OF THE CHILD.	1903.	1902.	1901.	1900.	5 years 1898 to 1902.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	10 years, 1878 to 1887.	10 years, 1868 to 1877.
First.....	25.94	25.12	25.25	23.82	23.78	23.78	25.20	23.7	25.2
Second	19.22	18.73	19.30	17.74	18.85	19.90	19.77	19.1	20.6
Third.....	14.49	13.38	14.07	14.58	14.46	15.29	14.94	15.5	15.5
Fourth.....	10.52	11.50	11.20	12.11	11.77	11.45	11.10	11.7	11.4
Fifth.....	8.16	8.99	8.61	8.82	8.85	8.52	8.23	8.8	8.4
First to Fifth	78.33	77.72	78.43	77.17	77.71	78.94	79.24	78.8	81.1
Sixth and over, and unstated.....	21.67	22.28	21.57	22.83	22.29	21.06	20.76	21.2	18.9
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0

TABLE XXVII.

Showing the Ages of the Fathers and Mothers of Children Born in 1903.

AGES OF FATHERS.	AGES OF MOTHERS.														No. of Fathers.
	15 years.	16 years.	17 years.	18 years.	19 years.	20-25 years.	25-30 years.	30-35 years.	35-40 years.	40-45 years.	45-50 years.	50-55 years.	55 years.	Unstated age.	
16 years.....						1									1
18 years.....		1	3	2		1									7
19 years.....		3	4	8	6	10	1								32
20-25 years....	1	13	26	61	136	941	174	14	1	3	1				1,371
25-30 years. . .	4	2	14	46	74	1,178	1,483	217	34	3		1			3,056
30-35 years.....			6	15	21	416	1,127	1,131	176	16		2			2,910
35-40 years.....			1		9	111	431	944	779	74	5	1			2,355
40-45 years....	1			1	2	30	108	249	518	294	13				1,216
45-50 years.....						7	40	79	176	158	24	1			485
50-55 years.....						2	7	20	45	44	11	1			130
55-60 years.....			1			2	4	4	10	19	2				42
60-65 years.....								3	4	4	1				12
65-70 years.....								2	3						5
Unstated age ...	1	5	9	15	25	51	20	8	3				22		159
No. of Mothers..	7	24	64	148	273	2,750	3,395	2,671	1,749	615	57	4	2	22	11,781

The nativity of the mothers under 19 years of age was as follows:

Of the seven at 15 years, 3 were American, 1 French-Canadian, 2 Portuguese, and 1 Swedish.

Of the twenty-four at 16 years, 20 were American, 1 French-Canadian, and 3 Italian.

Of the sixty-four at 17 years, 39 were American, 1 Austrian, 7 French-Canadian, 1 German, 1 Irish, 7 Italian, 5 Portuguese, 1 Russian, 1 Swedish, and 1 Syrian.

Of the one hundred and forty-eight at 18 years, 104 were American, 2 Austrian, 1 Belgian, 10 British American, 1 Finnish, 2 German, 1 Hawaiian, 1 Irish, 13 Italian, 1 Norwegian, 1 Polish, 6 Portuguese, 2 Russian, 1 Scotch, and 2 Swedish.

	Number of Mothers.	Per cent.
Under twenty years.....	516.....	4.38
Twenty, and under twenty-five.....	2,750.....	23.34
Twenty-five, and under thirty.....	3,395.....	28.82
Thirty, and under thirty-five.....	2,671.....	22.67
Thirty-five, and under forty.....	1,749.....	14.85
Forty, and under forty-five.....	615.....	5.22
Forty-five and over.....	63.....	.59
Unstated age.....	22.....	.13
Total.....	11,781.....	100.00

PLURALITY BIRTHS.

The general statistics in relation to plural births, in Rhode Island, may be found on page 8, Table III.

There were one hundred and thirty-one cases during the year, all of which were twins, thus making the number of two hundred and sixty-two children.

Of the 262 children of plural birth, 117 were males and 145 were females.

The cases occurred in the different divisions of the State as follows:

Bristol county, 3; Kent county, 8; Newport county*, 3; Newport city, 8; Providence county towns,† 54; Providence city, 52; Washington county, 3.

The following exhibit will show the parentage of children of plural birth in Rhode Island, in 1903, and number of each:

*Not including Newport city

†Including Central Falls, Pawtucket, and Woonsocket.

Parents both native Americans.....	36
Parents both born in British America.....	4
" " " England.....	3
" " " Canada (French).....	15
" " " Germany.....	2
" " " Ireland.....	14
" " " Italy.....	15
" " " Portugal.....	1
" " " Russia.....	1
" " " Scotland.....	1
" " " Sweden.....	1
American father and British-American mother.....	1
American father and English mother.....	4
American father and French-Canadian mother.....	3
American father and German mother.....	1
American father and Irish mother.....	4
American father and Russian mother.....	1
British-American father and American mother.....	2
English father and American mother.....	1
English father and Irish mother.....	2
French-Canadian father and American mother.....	5
French-Canadian father and Irish mother.....	1
German father and American mother.....	2
German father and Venezuelan mother.....	1
Irish father and American mother.....	3
Irish father and English mother.....	1
Irish father and French-Canadian mother.....	1
Norwegian father and Swedish mother.....	1
Portuguese father and American mother.....	1
Roumanian father and Russian mother.....	1
Scotch father and American mother.....	1
West Indian father and American mother.....	1

The months in which the plurality births occurred were as follows:

January.....14	April.....10	July.....10	October.....15
February.....11	May.....13	August.....6	November.....9
March.....11	June.....9	September.....9	December.....14
First Quarter.....36	Second Quarter.....32	Third Quarter.....25	Fourth Quarter.....38
First half of year.....68	Second half of year.....63		
Total.....	131		
Total children.....	262		

The general statistics of births, and number of *cases* reported in Rhode Island, during a period of fifty years, that is, from 1854 to 1903, inclusive, are as follows:

342,842 cases of single births.....	giving 342,842 children.
3,664 cases of twin births.....	giving 7,328 children.
36 cases of triple births.....	giving 108 children.
1 case of quadruple births.....	giving 4 children.

Of the whole number of *cases* of childbirth (346,543) during the fifty years, one in 95 produced twins, one in 9,626 produced triplets, and one in 346,543 produced quadruplets.

Of the whole number of children born during the same period (350,282), ascertained from the reports, one in every 48 was a twin; one in every 3,243 was a triplet.

Of the 3,701 *cases* of plurality births which have occurred in the State during the last fifty years, there were 1,330 cases in which both parents were natives; 1,814 cases in which both parents were foreign; 548 cases in which the parents were mixed, that is, one native and one foreign parent; and 9 in which the parentage was not stated.

The whole number of children born in plurality cases, during the fifty years, was 7,440, of whom 3,740 were males and 3,696 were females; the sex of the remaining four was not given.

STILL-BORN.

The whole number of still-born children reported in Rhode Island, for the year 1903, was 506; this number is larger by 44 than for the year 1902.

The following are the numbers reported from the different divisions of the State:

Bristol County.....	5
Kent County.....	28
Newport County Towns.....	11
Newport City.....	27
Providence County Towns.....	57
Central Falls.....	30
Pawtucket.....	31
Providence City.....	252
Woonsocket.....	46
Washington County.....	19
Whole State.....	506

The following table will give the number in each town from which still-births were reported, with the sex, parentage, and color:

TABLE XXVIII.

Still-Born, 1903; Locality, Number, Sex, Parentage, and Color.

TOWNS AND DIVISIONS OF THE STATE.	Total.	SEX.		PARENTAGE.		COLOR.	
		Males.	Females.	Native.	Foreign.	White.	Colored.
Barrington.....	2	2	.....	.....	2	2	.....
Bristol.....	2	2	.....	2	.....	2	.....
Warren.....	1	.....	1	.....	1	1	.....
BRISTOL COUNTY..	5	4	1	2	3	5	.....
Coventry.....	5	3	2	2	3	5	.....
East Greenwich	3	3	.....	2	1	3	.....
Warwick.....	20	8	12	3	17	20	.....
KENT COUNTY..	28	14	14	7	21	28	.....
Jamestown.....	1	.....	1	1	.....	1	.....
Middletown.....	1	1	.....	.....	1	1	.....
NEWPORT CITY..	27	15	12	12	15	26	1
New Shoreham..	1	.....	1	1	.....	1	.....
Portsmouth.....	2	1	1	1	1	2	.....
Tiverton.....	6	2	4	2	4	6	.....
NEWPORT COUNTY	38	19	19	17	21	37	1
Burrillville.....	13	7	6	5	8	13	.....
CENTRAL FALLS...	30	17	13	6	24	30	.....
Cranston.....	3	2	1	3	.....	3	.....
Cumberland.....	6	3	3	3	3	6	.....
East Providence..	10	3	7	10	.....	7	3
Foster.....	1	1	.....	1	.....	1	.....
Johnston.....	8	6	2	1	7	8	.....
Lincoln.....	11	8	3	3	8	11	.....
North Providence..	2	1	1	1	1	2	.....
North Smithfield...	1	1	.....	.....	1	1	.....
PAWTUCKET.....	31	20	11	15	16	31	.....
PROVIDENCE CITY	252	157	95	112	140	239	13
Scituate.....	2	2	.....	2	.....	2	.....
WOONSOCKET.....	46	32	14	13	33	46	.....
PROVIDENCE COUNTY	416	260	156	175	241	400	16
Charlestown.....	1	.....	1	1	.....	1	.....
Hopkinton.....	2	2	.....	2	.....	2	.....
Narragansett.....	1	1	.....	1	.....	.....	1
North Kingstown..	1	.....	1	1	.....	1	.....
South Kingstown..	5	2	3	5	.....	5	.....
Richmond.....	1	1	.....	1	.....	1	.....
Westerly.....	8	3	5	5	3	8	.....
WASHINGTON COUNTY	19	9	10	16	3	18	1
WHOLE STATE..	506	306	200	217	289	488	18

SUMMARY OF SEX OF STILL-BORN.

The following table shows the number and sex of the still-born children whose births were reported in Rhode Island during each of the last five years, and also of a period of fifty years, extending from January 1, 1854, to December 31, 1903:

TABLE XXIX.

SEX.	1903.	1902	1901.	1900.	1899.	Jan 1, 1854, to Dec. 31, 1903
Males.....	306	267	251	221	210	7,725
Females.....	200	195	218	153	179	5,536
Total.....	506	462	469	374	389	13,261

The average proportions of the sexes of the still-born, for the period of fifty years, were as follows: In every 100 still-births there were about 58 males and 42 females.

Season of Still-Births.—During 1903 the proportions in relation to season, by percentage, were as follows:

First Quarter.....	25.69	Third Quarter.....	27.47
Second Quarter.....	22.73	Fourth Quarter.....	24.11
First half of the year..	48.42	Last half of the year..	51.58

The births of the still-born in the different months of the year, although somewhat variable in number, do not, as a rule, show great discrepancies.

PARENTAGE OF THE STILL-BORN.

Of the 506 still-born children reported in 1903 there were 217 of native and 289 of foreign parentage, reckoned by the nativity of the fathers, that is, the father's name given; and 201 of native and 305 of foreign, reckoned by the nativity of the mothers, name of father given or not given.

ILLEGITIMATES.

In the following table will be found the whole number of illegitimate births returned during 1903, with the sex, color, parentage, and locality of birth:

TABLE XXX.

Illegitimates, 1903.

TOWNS.	Whole Number.	SEX.		COLOR.		PARENTAGE.	
		Males.	Females.	White.	Black.	Native.	Foreign.
Bristol.....	2	.....	2	2	.....	2	.....
Coventry.....	1	1	.....	1	.....	1	.....
East Greenwich.....	3	1	2	.....	3	3	.....
Warwick.....	1	1	.....	1	.....	1	.....
Middletown.....	1	.....	1	1	.....	1	.....
NEWPORT CITY.....	2	1	1	2	.....	.....	2
New Shoreham.....	3	1	2	3	.....	3	.....
Tiverton.....	2	2	.....	2	.....	2	.....
CENTRAL FALLS.....	3	.....	3	3	.....	1	2
Cranston.....	4	2	2	4	.....	1	3
Cumberland.....	3	2	1	3	.....	3	.....
East Providence.....	1	.....	1	1	.....	1	.....
Glocester.....	2	2	.....	2	.....	2	.....
Lincoln.....	2	1	1	2	.....	.....	2
PAWTUCKET.....	8	3	5	8	.....	4	4
PROVIDENCE CITY.....	90	41	49	76	14	31	59
North Kingstown.....	1	1	.....	1	.....	1	.....
South Kingstown.....	3	1	2	1	2	3	.....
Richmond.....	1	1	.....	1	.....	1	.....
Westerly.....	1	.....	1	.....	1	1	.....
WHOLE STATE.....	134	61	73	114	20	62	72

There were returns, during 1903, of 134 children of illegitimate parentage. The number is 9 less than that of the previous year.

Sex.—Of the 134, there were 61 males and 73 females.

Color.—Of the 134 illegitimates born during 1903, 114, or 85.1 per cent., were white; and 20, or 14.9 per cent., were colored.

Parentage.—Of the 134, 62, or 46.3 per cent. of all, were born of native mothers; and 72, or 53.7 per cent., of foreign born mothers. The colored illegitimates were all of native parentage. There were of the 114 white illegitimates, 42 born of native mothers and 72 of foreign mothers.

The ages of the mothers were as follows:

Age	No. of Mothers.	Age.	No. of Mothers.
16.....	5	28.....	2
17.....	9	29.....	1
18.....	14	30.....	4
19.....	21	32.....	3
20.....	14	33.....	1
21.....	16	34.....	1
22.....	10	35.....	1
23.....	5	38.....	3
24.....	5	39.....	1
25.....	2	—	—
26.....	12	Total.....	134
27.....	4		

Forty-eight of these illegitimate births occurred at the Lying-in-Hospital, in the city of Providence, and three at the State Almshouse.

The proportion of illegitimates to the whole number of births was about one in every 88 cases, or about 11 in every 1,000.

MARRIAGES, 1903.

The number of marriages registered in Rhode Island, during the year 1903, was 4,473. This number is 337 larger than in 1902 and 627 larger than in 1901.

The general statistics of marriage, in 1903, in relation to season and number, in the different divisions of the State, may be found in Table IV, on the ninth page.

The statistics in relation to the proportion to population of persons married in 1903, in each of the towns and general divisions of the State, may be found in Tables XV and XVI, on pages 116 and 119.

The following table will present the number of marriages, and the ratio of marriage to population, in each year for a period of forty-four years, 1860 to 1903, inclusive.

TABLE XXXI.

YEARS.	Number Marriages.	Of Population, one Person Married in every	Persons Married per 1,000 of Population.	YEARS.	Number Marriages.	Of Population, one Person Married in every	Persons Married per 1,000 of Population.
1860.....	1,748	50.0	20.0	1883.....	2,611	54.4	18.3
1861.....	1,533	56.8	17.6	1884.....	2,558	58.1	17.2
1862.....	1,450	61.1	15.1	1885.....	2,488	61.3	16.3
1863.....	1,618	54.7	18.3	1886.....	2,750	56.5	17.7
1864.....	1,844	50.1	19.9	1887.....	2,839	55.8	18.0
1865.....	1,896	48.7	20.5	1888.....	3,022	53.5	18.7
1866.....	2,318	39.9	25.1	1889.....	3,029	57.8	17.3
1867.....	2,344	39.8	25.1	1890.....	3,195	54.1	18.4
1868.....	2,285	40.5	24.8	1891.....	3,320	53.5	18.5
1869.....	2,289	47.5	21.1	1892.....	3,502	52.4	19.1
1870.....	2,362	46.0	21.7	1893.....	3,544	53.6	18.7
1871.....	2,336	46.5	21.5	1894.....	3,271	57.4	17.4
1872.....	2,537	42.9	23.2	1895.....	3,497	55.0	18.2
1873.....	2,630	41.3	24.2	1896.....	3,327	59.2	17.0
1874.....	2,541	50.8	19.6	1897.....	3,137	64.3	15.6
1875.....	2,485	52.0	19.2	1898.....	3,278	63.2	15.8
1876.....	2,253	57.3	17.5	1899.....	3,433	61.6	16.2
1877.....	2,282	56.6	17.7	1900.....	3,936	54.4	18.4
1878.....	2,324	55.7	17.9	1901.....	3,846	56.9	17.6
1879.....	2,396	57.8	17.5	1902.....	4,136	54.1	18.5
1880.....	2,769	49.9	20.0	1903.....	4,473	52.1	19.2
1881.....	2,750	50.3	19.9	Annual average..		53.1	19.1
1882.....	2,634	52.5	19.0				

SEASON.

The following table will show the number and percentage of marriages in Rhode Island, in each month and each quarter of the year 1903, together with the aggregate number and percentage in each quarter for fifty years, viz., from 1854 to 1903, inclusive:

TABLE XXXII.

MONTHS.	Number of marriages, each month, 1903.	Number of Mar- riages each Quar- ter, 1903.	Percentage of each Quarter to total Marriages, 1903.	Number of Mar- riages per Quarter, 50 yrs., 1854-1903.	Percentage each Quar- ter, 50 years.
January.....	332	1st Quarter... 867	19.38	1st Quarter. 27,301	21.10
February.....	368				
March.....	167				
April.....	358	2d Quarter... 1,277	28.55	2d Quarter.. 34,004	26.28
May.....	320				
June.....	599				
July.....	278	3d Quarter... 1,087	24.30	3d Quarter.. 30,372	23.47
August.....	377				
September.....	432				
October.....	456	4th Quarter... 1,242	27.77	4th Quarter.. 37,712	29.15
November.....	537				
December.....	249				
Total.. ..		4,473	100.00	129,389	100.00

The largest number of marriages in any one month, during 1903, occurred in the month of June. For thirty-eight years previous to 1892 the greatest number of marriages was in the month of November. Since then, with the exception of in 1895, 1899, and 1902, the greatest number of marriages has been in the month of June.

During 1903 the proportions in the different quarters, from the largest to the smallest, were as follows: second quarter, 28.55 per cent.; fourth quarter, 27.77 per cent.; third quarter, 24.30 per cent.; first quarter, 19.38 per cent.

NATIVITY OF PERSONS MARRIED.

The following table shows the *number* of marriages, according to the nativities of the parties, for each of the last three years, and also for the aggregate of twenty-five years, from 1858 to 1882, inclusive; also for four periods of five years each, from 1883 to 1902:

TABLE XXXIII.

BIRTH-PLACE.	1903.	1902.	1901.	5 years, 1898 to 1902. Total.	5 years, 1893 to 1897. Total.	5 years, 1888 to 1892. Total.	5 years, 1883 to 1887. Total.	25 years, 1858 to 1882. Total.
United States.....	2,009	1,845	1,769	8,594	7,846	7,813	7,157	33,553
Foreign countries.....	1,427	1,280	1,175	5,574	5,318	4,973	3,601	13,753
Native groom, foreign bride..	483	505	457	2,274	1,785	1,637	1,323	3,488
Foreign groom, native bride..	554	506	445	2,187	1,827	1,645	1,165	3,876
Not stated.....								64
Total.....	4,473	4,136	3,846	18,629	16,776	16,068	13,246	54,734

It will be understood that in the above enumerations the *parent nativity* of the persons married is not considered, but the country where born.

Parties born in the United States, although children of foreign born parents, are reckoned as natives.

In the following table are given the *percentages* by birth, of native, foreign, and mixed marriages, in each of the last three years, and in the aggregate of twenty-five years, from 1858 to 1882, inclusive; also for four periods of five years each, from 1883 to 1902:

TABLE XXXIV.

BIRTH-PLACE.	1903.	1902.	1901.	5 years, 1898 to 1902.	5 years, 1893 to 1897.	5 years, 1888 to 1892.	5 years, 1883 to 1887.	25 years, 1858 to 1882.
United States.....	44.91	44.61	46.00	46.22	46.81	48.62	54.02	61.30
Foreign countries.....	31.91	30.95	30.55	29.88	31.65	30.95	27.19	25.13
Mixed nativity.....	23.18	24.44	23.45	23.90	21.54	20.43	18.79	13.57
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be of some interest to notice that by the exhibit of the two preceding tables it is shown that, although the marriages of the native born (whether the issue of foreign born parents or natives) have, as a rule, *increased in numbers*, they have also steadily *decreased in proportion*, with two or three exceptional years, that

is, to the whole number of marriages; while the marriages of the class of the exclusively foreign born have been, for the past thirty years, gradually increasing in proportion.

Denominational.—The 4,473 marriages in 1903 were performed by clergymen of various denominations, or by civil authority, as follows:

DENOMINATIONAL.

Roman Catholic.....	2,097	Advent Christian.....	16
Baptist.....	554	Advent.....	15
Protestant Episcopal.....	505	Independent.....	10
Congregational.....	354	Seventh Day Baptist.....	10
Methodist.....	311	Armenian.....	9
Free Baptist.....	106	Friends' Ceremony.....	3
Universalist.....	86	Latter Day Saints.....	2
Christian.....	81	Evangelical.....	2
Lutheran.....	67	Greek (Orthodox).....	2
Justices of Supreme Court.....	58	New Jerusalem.....	2
United Presbyterian.....	57	Second Advent.....	2
Hebrew.....	47	Disciples of Christ.....	2
Presbyterian.....	32		
Primitive Methodist.....	22	Total.....	4,473
Unitarian.....	21		

AGES OF THE MARRIED.

In the following table the varying ages of persons married during 1903 are presented:

TABLE XXXV.

AGES OF GROOMS.	AGES OF BRIDES.													Number of Grooms.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	
Under 20.....	74	35	2	...	...	...	...	...	...	...	...	...	...	111
20 to 25.....	447	967	152	16	3	1	...	...	...	...	...	...	...	1,586
25 to 30.....	181	691	446	97	17	2	...	...	...	...	...	...	...	1,434
30 to 35.....	28	192	248	113	40	14	2	2	...	...	...	...	...	639
35 to 40.....	8	50	91	88	55	11	1	...	...	...	...	...	...	304
40 to 45.....	1	16	43	35	23	32	10	3	1	...	...	...	...	164
45 to 50.....	1	8	14	17	21	16	15	8	2	...	...	...	...	102
50 to 55.....	1	4	6	5	6	13	9	6	3	1	1	...	...	55
55 to 60.....	...	...	1	5	2	6	10	6	1	3	...	...	...	34
60 to 65.....	...	...	...	...	2	...	5	4	2	3	...	...	...	16
65 to 70.....	...	...	...	...	4	3	2	2	2	5	1	...	1	20
70 to 75.....	...	...	...	...	...	...	1	2	...	...	...	...	...	3
75 to 80.....	...	...	...	1	...	...	...	...	1	...	2	1	...	5
Number of Brides.	741	1963	1003	377	173	98	55	33	12	12	4	1	1	4,473

The extreme discrepancies in the ages of some couples married in 1903 were not so frequent as in some previous years.

The same results in 1903, in relation to numbers in the different age periods, may be presented in a different and perhaps clearer way as follows:

TABLE XXXVI.

1903.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.
Males.....	111	1,586	1,434	639	304	164	102	55	34	16	20	3	5
Females.....	741	1,963	1,003	377	173	98	55	33	12	12	4	1	1
Total persons.....	852	3,549	2,437	1,016	477	262	157	88	46	28	24	4	6

The whole number of persons in each division of ages, of both sexes, married in Rhode Island in each of the last thirty-eight years, that is, from 1866 to 1903, inclusive, is presented in the following table:

TABLE XXXVII.

YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 to 85.	85 to 90.	Not stated.
1866	693	1,931	1,025	419	213	127	81	59	25	21	12	1	...	...	...	23
1867	696	1,886	1,104	416	211	148	91	48	37	18	18	5	3	1	...	9
1868	644	1,835	1,050	432	219	133	82	61	30	29	11	8	4	...	...	32
1869	642	1,814	1,051	468	227	134	79	46	35	15	11	2	3	2	...	49
1870	744	1,833	1,084	415	216	159	86	64	26	24	12	3	2	...	...	6
1871	697	1,914	1,118	392	228	115	73	56	35	22	6	7	3	...	...	6
1872	786	2,073	1,182	434	237	131	81	61	43	21	13	6	1	...	...	5
1873	762	2,177	1,156	507	253	140	87	68	35	24	12	6	6	...	...	27
1874	770	1,992	1,179	459	268	159	101	52	36	39	8	9	1	...	...	9
1875	681	2,058	1,108	475	252	150	101	60	32	29	13	4	1	...	...	6
1876	691	1,741	1,041	450	224	154	80	53	27	19	12	1	2	...	...	9
1877	631	1,745	1,118	459	244	125	92	52	46	14	15	11	2	1	...	9
1878	618	1,832	1,123	441	259	162	74	49	39	20	17	2	4	...	...	8
1879	639	1,879	1,156	481	272	123	78	56	39	26	18	9	2	2	1	11
1888	688	2,301	1,262	556	329	163	91	65	33	27	15	3	3	1	...	1
1881	599	2,208	1,410	547	298	187	107	54	34	31	16	5	1	1	...	2
1882	498	2,125	1,377	563	301	161	102	57	36	27	11	5	3	2	...	...
1883	497	2,108	1,370	486	319	183	115	73	31	20	14	3	2	1	...	...
1884	484	2,027	1,289	569	307	152	114	64	48	30	23	6	3	...	...	...
1885	438	1,973	1,296	540	309	163	102	57	45	27	13	7	3	...	1	2
1886	505	2,133	1,552	603	283	174	103	73	24	26	18	5	1	...	...	...
1887	501	2,308	1,552	607	294	162	114	49	39	23	19	7	3	...	...	...
1888	582	2,427	1,608	640	330	207	105	60	36	17	23	7	2	...	...	...
1889	543	2,463	1,492	712	379	182	121	66	45	8	16	9	...	2	...	...
1890	596	2,693	1,632	673	320	206	102	69	41	29	20	7	2	...	...	...
1891	685	3,141	1,442	635	315	158	115	64	35	21	17	6	1	1	...	4
1892	668	3,011	1,729	732	389	201	122	60	35	30	14	4	3	...	...	6
1893	676	2,777	1,869	776	436	237	133	79	47	39	9	8	...	1	1	...
1894	613	2,760	1,613	680	375	183	150	74	39	29	17	3	5	1	...	...
1895	607	2,763	1,887	767	417	227	142	83	49	22	12	13	4	1	...	...
1896	617	2,647	1,841	713	352	204	124	61	45	24	18	5	3	...	...	...
1897	542	2,490	1,746	659	359	184	125	81	38	22	15	9	3	1	...	...
1898	579	2,639	1,795	675	394	187	127	82	38	20	10	7	3	...	...	...
1899	587	2,720	1,871	810	361	201	149	59	54	31	11	8	3	1	...	...
1900	729	2,982	2,155	935	444	240	155	103	74	24	24	6	1	...	...	...
1901	692	3,001	2,144	870	441	228	146	85	41	43	20	8	3	...	...	...
1902	815	3,217	2,225	890	497	250	142	86	63	37	30	13	4	2	1	...
1903	852	3,549	2,437	1,016	477	262	157	88	46	28	24	4	6	...	...	...

In the following table will be found the number and proportion of the persons married under 20 years of age, both sexes, in nine periods of five years each, from 1856 to 1900, inclusive; for the whole period of forty-five years, and in 1901, 1902, and 1903:

TABLE XXXVIII.

5-YEAR PERIODS.	Total number of persons married.	Persons married under 20.	Percentage under 20.
1856-1860.....	15,838	3,294	20.79
1861-1865.....	16,682	2,406	14.42
1866-1870.....	23,196	3,419	14.74
1871-1875.....	25,058	3,696	14.75
1876-1880.....	24,048	3,267	13.59
1881-1885.....	26,082	2,516	9.65
1886-1890.....	29,670	2,727	9.19
1891-1895.....	34,268	3,249	9.48
1896-1900.....	34,226	3,054	8.92
45 years, 1856-1900.....	229,068	27,628	12.06
1901.....	7,692	692	9.00
1902.....	8,272	815	9.85
1903.....	8,946	852	9.52

Per cent. first fifteen years.....16.37

Per cent., second fifteen years.....12.60

Per cent., last two years.....9.46

PROPORTION TO SEX.

Table exhibiting the percentages of GROOMS in each division of ages, in each of the last forty-four years:

TABLE XXXIX.

YEARS	SEX.						Total.
	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 and over.	
GROOMS. 1860.....	5.0	42.8	26.9	16.3	5.7	3.3	100.0
1861.....	4.6	44.5	25.4	15.5	5.8	4.2	100.0
1862.....	4.2	37.8	27.9	18.3	5.9	5.9	100.0
1863.....	3.5	38.0	29.6	17.2	5.8	5.9	100.0
1864.....	4.3	38.8	27.3	17.9	7.4	4.3	100.0
1865.....	3.5	37.0	28.4	18.9	7.5	4.7	100.0
1866.....	5.3	40.9	27.0	16.4	6.3	4.1	100.0
1867.....	4.3	40.1	27.9	16.8	6.8	4.1	100.0
1868.....	4.1	39.9	28.2	17.1	6.1	4.6	100.0
1869.....	4.3	39.6	27.7	18.5	6.1	3.8	100.0
1870.....	4.8	40.4	28.1	16.0	6.4	4.3	100.0
1871.....	5.3	40.1	28.9	16.5	4.9	4.3	100.0
1872.....	4.3	41.3	28.2	16.6	5.2	4.4	100.0
1873.....	3.8	42.4	26.7	17.0	6.0	4.1	100.0
1874.....	4.1	40.4	27.2	17.5	6.4	4.4	100.0
1875.....	3.5	40.9	27.8	17.6	6.1	4.2	100.0
1876.....	5.1	37.5	28.6	17.9	5.6	4.3	100.0
1877.....	4.3	36.0	30.2	18.7	5.9	6.9	100.0
1878.....	3.9	38.5	29.0	18.0	6.3	4.3	100.0
1879.....	3.9	37.8	28.8	19.3	5.4	4.8	100.0
1880.....	3.6	38.9	27.5	19.9	5.8	4.3	100.0
1881.....	2.8	37.2	29.7	19.5	6.8	4.0	100.0
1882.....	2.2	36.0	31.4	20.0	6.1	4.3	100.0
1883.....	2.9	36.2	31.7	17.7	7.2	4.3	100.0
1884.....	2.5	36.2	29.1	21.1	6.2	5.0	100.0
1885.....	2.6	34.7	30.2	20.9	6.8	4.8	100.0
1886.....	2.5	35.2	31.9	19.6	6.8	4.0	100.0
1887.....	1.7	37.1	31.6	19.6	6.2	3.8	100.0
1888.....	2.8	36.1	31.1	19.8	6.5	3.7	100.0
1889.....	2.3	37.6	27.8	21.3	6.6	4.4	100.0
1890.....	3.3	36.9	30.8	18.9	6.1	4.0	100.0
1891.....	3.2	44.7	26.4	17.2	5.2	3.3	100.0
1892.....	2.3	40.1	29.3	19.0	6.1	3.2	100.0
1893.....	2.9	35.3	30.7	21.0	6.3	3.8	100.0
1894.....	3.0	37.4	29.3	19.9	6.8	3.6	100.0
1895.....	2.2	36.0	30.6	21.0	6.3	3.9	100.0
1896.....	2.1	35.5	33.2	19.6	6.1	3.5	100.0
1897.....	2.3	35.5	32.6	19.3	6.3	4.0	100.0
1898.....	2.4	36.4	31.8	19.8	6.1	3.5	100.0
1899.....	2.3	35.0	30.9	21.6	6.6	3.6	100.0
1900.....	2.4	33.6	32.0	21.6	6.2	4.2	100.0
1901.....	2.1	35.3	31.4	21.5	6.1	3.6	100.0
1902.....	2.5	35.7	31.7	20.4	5.9	3.8	100.0
1903.....	2.5	35.4	32.1	21.1	5.9	3.0	100.0

Table exhibiting the percentages of BRIDES in each division of ages, in each of the last forty-four years:

TABLE XL.

YEARS.							Total.
	Under 20	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 and over.	
1860.....	25.8	44.1	17.0	9.1	2.6	1.4	100.0
1861.....	29.6	42.0	15.2	7.8	4.1	1.3	100.0
1862.....	24.9	41.3	16.7	11.8	4.1	1.2	100.0
1863.....	24.9	42.6	16.9	9.8	4.1	1.7	100.0
1864.....	24.2	43.4	17.8	10.3	2.9	1.4	100.0
1865.....	22.6	43.3	19.1	11.0	3.5	1.5	100.0
1866.....	24.7	42.9	17.4	11.0	2.7	1.3	100.0
1867.....	25.4	40.5	19.3	10.0	3.4	1.4	100.0
1868.....	24.4	40.9	18.1	11.6	3.3	1.7	100.0
1869.....	24.1	40.5	18.7	12.1	3.4	1.2	100.0
1870.....	26.8	39.4	17.9	10.8	3.9	1.2	100.0
1871.....	24.6	41.9	19.1	10.1	3.1	1.2	100.0
1872.....	26.7	40.5	18.4	9.9	2.2	1.3	100.0
1873.....	25.3	40.8	17.5	12.0	2.7	1.7	100.0
1874.....	26.3	38.1	19.3	11.1	3.9	1.3	100.0
1875.....	23.9	42.1	16.8	11.8	4.0	1.4	100.0
1876.....	25.6	39.8	17.6	12.0	3.7	1.3	100.0
1877.....	23.4	40.4	18.8	12.1	3.6	1.7	100.0
1878.....	22.7	40.4	19.3	12.2	8.8	1.6	100.0
1879.....	22.8	40.7	19.4	12.1	3.0	2.0	100.0
1880.....	21.1	44.2	18.0	12.0	3.3	1.4	100.0
1881.....	19.0	43.0	21.5	11.2	3.8	1.5	100.0
1882.....	16.7	44.8	20.9	12.6	3.9	1.1	100.0
1883.....	16.2	44.2	20.6	13.2	4.3	1.5	100.0
1884.....	16.4	43.0	21.3	13.2	4.2	1.9	100.0
1885.....	14.9	44.6	21.8	13.2	3.8	1.7	100.0
1886.....	15.8	42.4	24.5	12.5	3.3	1.5	100.0
1887.....	15.9	44.1	22.8	12.1	3.5	1.6	100.0
1888.....	16.4	44.3	22.1	12.4	3.7	1.1	100.0
1889.....	15.1	43.7	21.5	14.7	3.4	1.6	100.0
1890.....	15.4	47.3	20.4	12.0	3.6	1.3	100.0
1891.....	17.4	49.9	17.0	11.4	3.1	1.2	100.0
1892.....	16.8	45.9	20.1	13.0	3.1	1.1	100.0
1893.....	16.2	43.0	22.0	13.3	4.1	1.4	100.0
1894.....	15.7	47.0	20.0	12.3	3.4	1.6	100.0
1895.....	15.2	43.0	23.4	12.8	4.3	1.3	100.0
1896.....	16.4	44.1	22.1	12.4	3.8	1.2	100.0
1897.....	14.9	43.9	23.1	13.2	3.5	1.4	100.0
1898.....	15.3	44.1	22.9	12.9	3.4	1.4	100.0
1899.....	14.8	44.3	23.6	12.5	3.6	1.2	100.0
1900.....	16.2	42.1	22.7	13.4	3.9	1.7	100.0
1901.....	15.8	42.8	23.5	12.6	3.7	1.6	100.0
1902.....	17.2	42.1	22.1	13.1	3.5	2.0	100.0
1903.....	16.6	43.9	22.4	12.3	3.4	1.4	100.0

BRIDES.

It will be noticed in the preceding tables that the proportions of persons married of both sexes, under 20 years of age, largely decreased during the last decade.

Of grooms, the proportion, compared with the first decade, has decreased over 44 per cent., and of brides more than 37 per cent.

The proportion of males married, between the ages of twenty and twenty-five, has decreased nearly 10 per cent., and has correspondingly increased in the more advanced age periods.

The proportion of females married, between twenty and twenty-five years of age, has not varied much, while of those between twenty-five and forty there has been an increase of proportion similar to that of males.

NUMBER OF TIMES MARRIED.

There will be found in the following table the number of grooms and of brides who were married for the first, second, third, etc., time in 1903:

TABLE XLI.

	First Marriage.	Second Marriage.	Third Marriage.	Fourth Marriage.	Total.
Grooms.....	4,010	414	46	3	4,473
Brides	4,029	305	138	1	4,473

The proportion of *grooms* married for the first time, in 1903, was 89.6 per cent. of the whole number, and the proportion of *brides* married for the first time was 90 per cent.

The following table will show not only the number of times each of the parties was married, but also the number of bachelors and widowers who married spinsters, the number who married widows of first or second widowhood, etc., and of spinsters and widows who married bachelors, and widows of the second, third, or fourth marriage, etc.:

TABLE XLII.

GROOMS.	BRIDES.				Total Grooms.
	First.	Second.	Third.	Fourth.	
First Marriage.....	3 778	119	113	.....	4,010
Second Marriage.....	229	168	16	1	414
Third Marriage.....	21	16	9	.....	46
Fourth Marriage	1	2	.....	.....	3
Total Brides.....	4,029	305	138	1	4,473

It will be seen, by Table XLII, that 232 bachelors married widows, 113 of whom married brides that had been twice married. Of the 463 widowers who married in 1903, 251 married spinsters and 212 married widows. Of the widows who married widowers, 25 had been twice married, and 1 three times, previously.

MARRIAGES OF PERSONS OF COLOR.

The number of marriages of persons of color in Rhode Island, in 1903, was 124. This includes eight marriages in which one of the parties was white. The number and color of the individuals were, therefore, 240 persons of color and 8 persons white. Of the white persons, 4 were males and 4 were females. The marriages, however, may be properly included in the above class, inasmuch as the offspring of such marriages are persons of color.

The number reported during 1903, from the different towns, was as follows, viz.:

Bristol.....	1
East Greenwich	5
Warwick.....	1
Jamestown.....	2
Newport City.....	14
Central Falls.....	1
East Providence.....	1
Pawtucket.....	1
Providence City.....	89
North Kingstown.....	1
South Kingstown.....	2
Richmond.....	1
Westerly.....	5
Total.....	124

There were also 12 marriages of Chinese with white women.

MARRIAGES OF THE DIVORCED.

The following table will give the towns from which returns of marriage with the facts of divorce were reported during 1903, the whole number of marriages of divorced persons, whether of one or both parties; also whether the second or third marriage of the divorced groom or bride:

TABLE XLIII.

TOWNS.	Number of Marriages.	Number of Divorced Persons Married.	Grooms.	Brides.	Second Marriage of Groom.	Third Marriage of Groom.	Fourth Marriage of Groom.	Second Marriage of Bride.	Third Marriage of Bride.	Fourth Marriage of Bride.
PROVIDENCE CITY.....	142	157	83	74	72	9	2	64	10	.....
Bristol.....	3	4	2	2	2	.....	.....	2	.....	.....
Warren.....	2	2	1	1	1	.....	.....	.....	1	.....
Coventry.....	3	3	1	2	1	.....	.....	2	.....	.....
East Greenwich.....	2	3	1	2	1	.....	.....	2	.....	.....
Warwick.....	7	7	4	3	4	.....	.....	2	1	.....
Little Compton.....	1	1	1	.....	.....	1	.....	.....	.....	.....
NEWPORT CITY	8	8	6	2	6	.....	.....	2	.....	.....
Tiverton.....	1	1	1	.....	1	.....	.....	.....	.....	.....
Burrillville.....	3	3	2	1	2	.....	.....	1	.....	.....
CENTRAL FALLS.....	5	6	2	4	1	1	.....	4	.....	.....
Cranston.....	10	10	5	5	5	.....	.....	3	2	.....
Cumberland.....	4	4	2	2	2	.....	.....	1	.....	1
East Providence.....	2	3	1	2	1	.....	.....	.....	2	.....
Foster.....	1	1	.....	1	.....	.....	.....	.....	1	.....
PAWTUCKET.....	38	44	22	22	20	2	.....	22	.....	.....
Scituate.....	2	2	.....	2	.....	.....	.....	2	.....	.....
Smithfield.....	1	1	.....	1	.....	.....	.....	1	.....	.....
WOONSOCKET.....	5	5	1	4	1	.....	.....	4	.....	.....
Charlestown.....	1	1	.....	1	.....	.....	.....	1	.....	.....
Hopkinton.....	2	2	.....	2	.....	.....	.....	2	.....	.....
Narragansett.....	2	3	2	1	2	.....	.....	.....	1	.....
North Kingstown.....	1	1	.....	1	.....	.....	.....	1	.....	.....
South Kingstown.....	5	6	2	4	2	.....	.....	4	.....	.....
Westerly.....	7	8	2	6	2	.....	.....	6	.....	.....
Total.....	258	286	141	145	126	13	2	126	18	1

There were 258 marriages, in 1903, in which one or both of the parties had been divorced.

The proportion of the *number of marriages* of which one or both of the parties had been divorced, to the whole number of marriages, was 5.8 per cent., or 1 in every 17.

But the proportion of divorced *persons* married during 1903, to the whole number of persons married in the same year, was about one in every 31, or 3.2 per cent., or 32 in every 1,000.

The number of divorced persons married, in 1903, was 19 larger than in the previous year.

These 258 marriages of divorced persons were performed by clergymen of the different denominations, or by civil authority, as follows:

Baptist	89	Primitive Methodist.. . . .	4
Congregational	49	Advent Christian.. . . .	2
Methodist	41	Unitarian.. . . .	2
Free Baptist.. . . .	14	Hebrew.. . . .	2
Presbyterian.. . . .	9	Roman Catholic.. . . .	1
Protestant Episcopal.. . . .	7	Advent.. . . .	1
Universalist.. . . .	7	Independent	1
Christian	7	Evangelical.	1
Lutheran	5	Justices of Supreme Court.	16

Marriage and Education.—Of the number of persons married, in 1903, 594 signed their marriage certificates with a mark. The following will show the number of males and females who did so and their nativity:

	Whole Number.	Native.	Foreign
Males	281	29	252
Females.	348	46	302
Total.	629	75	554

DIVORCES, 1903.

According to the returns made to the Secretary of the State Board of Health (State Registrar) by the clerks of the Supreme Courts of the different counties of Rhode Island, the number of applications for divorce, during 1903, was six hundred and sixty-six (666).

The number of divorces granted, during 1903, was four hundred and twenty-seven (427).

There were 5 less applications, during 1903, than during the preceding year, and the number of divorces granted was 65 less.

Divorced are decreed for the following seven statute causes, viz.:

1. Adultery.
2. Extreme cruelty.
3. Willful desertion for five years of either of the parties, or for a shorter period, in the discretion of the court.
4. Continued drunkenness.
5. Neglect or refusal to provide necessities (having ability) for the subsistence of a wife.
6. Gross misbehavior and wickedness other than aforesaid.
7. Impotency.

Divorces are also decreed, or marriages set aside, in the discretion of the court, for ascertained affinity, consanguinity, idiocy, insanity, penitentiary crimes, and bigamous or otherwise illegal marriage.

The following table shows the number of applications for divorce, and the number granted, in 1903, in each county of the State; also the causes alleged for the applications:

TABLE XLIV.

COUNTIES.			CAUSES ALLEGED.									Total Causes Alleged.
	Number of applications.	Number Granted.	Adultery.	Extreme Cruelty.	Willful Desertion.	Continued Drunkenness.	Neglect to Provide Necessaries, etc.	Other Gross Misbehavior.	Void Marriage.	Habitual use of Morphine.	Lived separate and apart for over 10 yrs.	
Bristol.....	13	9	1	6	6	4	11	2	.....	.....	.....	30
Kent.....	32	28	7	8	13	5	22	7	1	.....	.....	63
Newport.....	27	17	5	10	16	3	11	8	.....	.....	.....	53
Providence.....	564	355	76	213	212	103	366	72	4	7	7	1,060
Washington.....	30	18	5	13	22	11	26	20	.....	.....	.....	97
Whole State ...	666	427	94	250	269	126	436	109	5	7	7	1,303

There were, during the year 1903, six hundred and sixty-six (666) applications for divorce, and the whole number of causes alleged was thirteen hundred and three (1,303). There was, therefore, an average of nearly two causes alleged in each application.

The causes alleged why divorcees should be granted in the applications, during 1903, were 28 less in number than in 1902.

COUNTIES.	SEX.	CAUSES OF APPLICATIONS WHERE DIVORCE WAS GRANTED.								APPLICANT.			
		Adultery	Extreme Cruelty.	Willful Desertion.	Continued Drunkenness.	Neglect to Provide Necessaries, etc.	Other Gross Misbehavior.	Void Marriage.	Lived separate and apart for more than 10 years.	Excessive and Intemperate use of Morphine.	Husband.	Wife.	Total.
Bristol County.....	Males.....		1	1							2		15
	Females.....			3	2	8						13	
Kent County.....	Males.....	3	1	2							6		38
	Females.....		3	9	1	19						32	
Newport County....	Males ..	2	1	5			3				11		29
	Females..	2	2	5		8	1					18	
Providence County..	Males....	25	7	37	6		2	3		1	81		467
	Females..	9	34	78	31	233		1				386	
Washington County	Males....	1		3							4		21
	Females..		5	1	3	8						17	
Total	Males ..	31	10	48	6		5	3		1	104		570
	Females..	11	44	96	37	276	1	1				466	

LENGTH OF TIME MARRIED.		Bristol County.	Kent County.	Newport County.	Providence County.	Washington County.	Whole State.
Number under six months.....					8		8
Six months and under one year.....					20		20
One year and under five.....		5	7	2	154	3	171
Five years and under ten.....		2	9	6	138	6	161
Ten years and over.....		5	15	9	233	9	271
Unstated.....		1	1	10	11	12	35

Average of years of marriage in Bristol County.....	10 years, 6 months.
" " " Kent County.....	11 years, 6 months.
" " " Newport County.....	16 years, 6 months.
" " " Providence County.....	9 years, 5 months.
" " " Washington County.....	10 years.
" " " Whole State.....	11 years, 7 months

In order to show the actual number of applications, and the number of divorces granted, in each of the last thirty-one years, the following summary is presented:

	Applications for divorce.	Divorces granted.	Applications refused or continued or withdrawn.
1873.....	261.....	173.....	88.....
1874.....	271.....	242.....	34.....
1875.....	227.....	158.....	69.....
1876.....	254.....	196.....	58.....
1877.....	257.....	178.....	79.....
1878.....	258.....	196.....	62.....
1879.....	255.....	246.....	9.....
1880.....	347.....	273.....	74.....
1881.....	350.....	268.....	82.....
1882.....	339.....	271.....	68.....
1883.....	321.....	257.....	64.....
1884.....	320.....	266.....	54.....
1885.....	293.....	227.....	66.....
1886.....	336.....	257.....	79.....
1887.....	322.....	248.....	74.....
1888.....	304.....	224.....	80.....
1889.....	366.....	274.....	92.....
1890.....	327.....	244.....	83.....
1891.....	362.....	275.....	87.....
1892.....	412.....	296.....	116.....
1893.....	529.....	301.....	228.....
1894.....	506.....	280.....	226.....
1895.....	516.....	373.....	143.....
1896.....	526.....	363.....	163.....
1897.....	544.....	372.....	172.....
1898.....	615.....	400.....	215.....
1899.....	648.....	412.....	236.....
1900.....	714.....	466.....	248.....
1901.....	751.....	517.....	234.....
1902.....	671.....	492.....	179.....
1903.....	666.....	427.....	239.....
31 years, total.....	12,873.....	9,172.....	3,701.....

The average annual proportion of decrees of divorce granted during the last thirty-one years, to the applications therefor, was 71.6 per cent.

During the last ten years the proportions were as follows:

Years.....	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Per cent.....	55.3...	72.3...	69.0...	68.4...	65.0...	63.6...	65.3...	68.8...	73.3...	64.1

The proportion of *divorces granted*, in 1903, to the whole number of marriages, during the same year, was *one divorce* to every ten and five-tenths marriages.

The proportion of *applications for divorce* to whole number of marriages, during the year, was one *application* to every six and seven-tenths marriages.

The following table shows the number of divorcees granted in each county, and the whole State, in each of the last thirty-five years, and the proportion of marriages to each divorcee granted in each year:

TABLE XIV.

YEARS.	Bristol County.		Kent County.		Newport County.		Providence County.		Washington County.		Whole State.	
	Divorces Granted.	Marriages to one Divorcee.	Divorces Granted.	Marriages to one Divorcee.	Divorces Granted.	Marriages to one Divorcee.	Divorces Granted.	Marriages to one Divorcee.	Divorces Granted.	Marriages to one Divorcee.	Divorces Granted.	Marriages to one Divorcee.
1869.....	10	10.6	15	12.5	6	27.7	120	13.8	11	15.5	162	14.1
1870.....	3	22.7	18	11.8	6	26.3	152	11.3	21	9.3	200	11.8
1871.....	5	16.8	11	17.9	4	49.7	123	13.3	18	11.4	161	14.5
1872.....	8	10.2	13	15.7	8	22.9	149	12.6	22	8.9	200	12.7
1873.....	6	16.2	22	9.8	8	21.9	131	14.8	6	33.7	173	15.2
1874.....	10	8.9	20	8.0	6	29.0	190	10.0	16	11.6	242	10.5
1875.....	2	50.0	18	8.8	7	23.4	120	14.9	11	20.5	158	15.7
1876.....	6	14.5	15	12.8	7	20.5	148	11.1	20	8.8	190	11.5
1877.....	7	12.0	9	16.3	7	26.0	134	12.4	21	9.9	178	12.8
1878.....	4	26.0	11	13.3	13	12.8	156	10.9	12	17.3	196	11.9
1879.....	5	18.8	19	9.0	7	24.1	195	9.1	20	9.7	246	9.7
1880.....	8	12.1	23	9.4	11	17.6	208	9.7	23	17.0	273	10.1
1881.....	6	20.1	26	7.3	10	16.9	207	10.0	19	11.0	268	10.4
1882.....	6	15.0	18	10.3	15	13.0	221	8.9	11	16.2	271	9.7
1883.....	6	15.8	15	11.5	9	21.2	214	9.2	13	13.3	257	10.2
1884.....	4	16.7	20	8.0	12	15.7	209	9.3	21	8.2	266	9.6
1885.....	3	23.0	9	18.6	17	11.2	186	10.1	12	15.0	227	11.0
1886.....	5	16.0	17	11.0	15	12.3	194	10.9	26	7.3	257	10.7
1887.....	1	75.0	23	8.0	13	13.4	187	11.8	24	7.9	248	11.4
1888.....	5	15.8	14	13.5	4	46.0	188	12.5	13	16.5	224	13.5
1889.....	6	12.5	27	8.3	14	14.0	211	11.2	16	10.8	274	11.1
1890.....	4	27.5	19	12.1	1	232.0	196	12.3	24	8.8	244	13.0
1891.....	10	8.1	20	11.2	17	12.6	214	11.2	14	14.3	275	12.1
1892.....	2	49.5	19	12.4	20	11.6	236	11.6	19	10.4	296	11.8
1893.....	3	38.0	10	23.8	21	9.9	235	11.5	22	8.0	301	11.8
1894.....	7	16.0	22	9.0	18	12.3	207	12.4	26	6.8	280	11.7
1895.....	8	10.9	17	9.9	11	21.3	318	8.8	19	11.2	373	9.4
1896.....	7	12.4	21	7.5	18	11.3	304	8.8	13	16.1	263	9.2
1897.....	9	9.3	20	8.5	16	12.9	306	8.1	21	9.7	372	8.4
1898.....	7	12.4	22	9.3	19	9.9	333	7.8	19	9.8	400	8.2
1899.....	6	13.5	20	11.9	18	12.0	355	7.7	13	13.0	412	8.3
1900.....	8	10.6	19	12.4	15	17.1	400	7.9	24	8.8	466	8.5
1901.....	8	11.6	19	13.5	16	13.3	456	6.8	18	10.4	517	7.4
1902.....	10	9.4	26	10.3	17	14.4	413	8.0	26	8.4	492	8.4
1903.....	9	14.1	28	8.7	17	15.1	355	10.2	18	12.2	427	10.5

The ratio of divorces granted in the entire State, during 1903, to the whole number of marriages during the same year, was one divorce to every ten and five-tenths marriages, as previously stated.

During the ten years 1869 to 1878, inclusive, the ratio of divorce to number of marriages was one divorce to every thirteen; during the ten years 1879 to 1888, inclusive, the ratio was one divorce to ten and six-tenths marriages.

The average of the last ten years was one divorce to every nine and one-tenth marriages.

During the thirty-five years 1869-1903, the average proportions of divorce to marriage, in the several counties and the State, have been as follows:

Bristol County.....	One divorce to every 19.2 marriages.
Kent County.....	One divorce to every 11.5 marriages.
Newport County.....	One divorce to every 24.9 marriages.
Providence County.....	One divorce to every 10.6 marriages.
Washington County.....	One divorce to every 12.2 marriages.
Whole State.....	One divorce to every 11.1 marriages.

Table showing the Number of Marriages to every Decree of Divorce, in five of the New England States, during the twenty-seven years from 1877 to 1903.

TABLE XLVI.

STATES.	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Rhode Island	12.8	11.9	9.7	10.1	10.4	9.7	10.2	9.6	11.0	10.7	11.4	13.5	11.1	13.0	12.1	11.8	11.8	11.7	9.4	9.2	8.4	8.2	8.3	8.5	7.4	8.4	10.5
Maine	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.4	9.2	8.3	8.4	8.3	7.4	6.7	6.7	6.8	7.1	6.5	6.6
New Hampshire	.....	.....	7.7	9.2	10.9	12.8	10.4	10.9	8.3	10.7	8.7	9.8	9.5	9.5	11.7	10.3	12.6	9.9	9.9	8.8	8.5	8.6	9.3	8.3	8.4	7.8	
Vermont	15.0	14.0	21.0	20.0	16.0	17.8	16.4	13.5	28.8	20.0	13.5	16.9	19.6	18.3	17.1	17.4	15.9	12.3	9.7	11.2	11.9	13.0	12.3	13.2	13.5	.....
Massachusetts	23.1	21.4	23.4	26.8	40.9	34.3	27.8	28.2	26.4	30.0	24.5	30.6	26.9	31.8	27.1	28.5	21.8	18.6	24.2	14.7	20.5	18.7	20.2	19.3	18.1	17.4	12.1
Connecticut	10.1	10.7	13.4	13.9	11.6	12.8	12.1	14.9	13.3	14.2	14.9	13.8	10.7	13.2	13.7	13.2	16.6	15.9	15.9	14.5	16.0	15.3	15.9	15.5	13.9	16.6	15.1

DEATHS, 1903.

The number of deaths registered in Rhode Island during 1903, according to the returns made to the State Registrar, was eight thousand, six hundred and forty-two (8,642).

This number is larger by 687 than that of 1902.

The death rate (18.5 in every 1,000 living persons) was 0.7 higher than that of the previous year.

The following summary will show the death rates per 1,000 for each of the last five census years, in comparison with the last five years:

1880.	1885.	1890.	1895.	1900.	1899.	1900.	1901.	1902.	1903.
17.5...	17.7.....	20.7.....	19.6.....	20.6.....	17.6.....	20.6.....	18.2.....	17.8.....	18.5

Since 1876 the returns have been more complete than previously, and during the last ten years few deaths have occurred in the State which were not reported.

On the following page will be found the death rates, by counties, for forty-three years.

SEX OF DECEDENTS.

Of the 8,642 persons whose deaths were returned during the year 1903, 4,461 were males and 4,181 were females; the ratio standing at 106.8 males to each 100 females, or about 516 males and 484 females in every 1,000 decedents.

The following table will show the number and proportion of males and females among the *decedents* in Rhode Island during the ten years 1853 to 1862, inclusive; also in each of the forty-one years from 1863 to 1903, inclusive, and for the entire period of fifty-one years:

TABLE XLVIII.—DEATHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853-1862.	10,930	11,269	96.9
1863.	1,621	1,586	102.2
1864	1,633	1,727	92.4
1865	1,686	1,719	98.1
1866	1,497	1,473	101.5
1867	1,442	1,447	99.7
1868	1,413	1,499	94.3
1869	1,696	1,686	100.6
1870	1,588	1,650	96.2
1871	1,621	1,723	94.1
1872	2,118	2,129	99.4
1873	2,166	2,237	95.5
1874	2,111	2,118	99.7
1875	2,108	2,209	95.4
1876	1,969	2,147	91.7
1877	2,132	2,318	92.0
1878	2,161	2,280	94.8
1879	2,183	2,289	95.4
1880	2,366	2,463	96.0
1881	2,467	2,549	96.8
1882	2,487	2,587	96.5
1883	2,627	2,655	99.0
1884	2,486	2,655	93.6
1885	2,607	2,782	93.7
1886	2,833	3,016	93.9
1887	3,177	3,163	100.4
1888	3,199	3,395	95.4
1889	3,093	3,166	97.7
1890	3,501	3,433	102.0
1891	3,341	3,279	101.9
1892	3,725	3,671	101.5
1893	3,789	3,651	103.8
1894	3,559	3,601	98.8
1895	3,799	3,736	101.6
1896	3,874	3,630	106.7
1897	3,587	3,523	106.7
1898	3,554	3,351	106.1
1899	3,725	3,733	99.8
1900	4,473	4,350	102.8
1901	4,066	3,900	104.2
1902	4,042	3,913	103.3
1903	4,461	4,181	106.8
51 years.	122,913	123,889	98.8

The following table of *births*, during the same period of time as the preceding, will show by comparison the different proportions of the sexes in the two classes of events:

TABLE XLIX.—BIRTHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853-1862.....	18,377.	17,260.	106.4
1863.....	1,892.	1,788.	105.8
1864.....	1,949.	1,942.	100.3
1865.....	2,096.	1,857.	112.9
1866.....	2,546.	2,256.	108.0
1867.....	2,655.	2,464.	107.0
1868.....	2,745.	2,627.	104.5
1869.....	2,685.	2,560.	104.9
1870.....	2,679.	2,536.	104.9
1871.....	2,878.	2,800.	105.8
1872.....	3,085.	3,058.	100.9
1873.....	3,135.	2,887.	108.6
1874.....	3,311.	3,155.	104.9
1875.....	3,362.	3,146.	106.9
1876.....	3,291.	3,038.	108.3
1877.....	3,163.	3,072.	103.0
1878.....	3,402.	3,312.	102.7
1879.....	3,259.	3,091.	105.4
1880.....	3,241.	3,054.	106.1
1881.....	3,498.	3,263.	107.2
1882.....	3,509.	3,316.	105.8
1883.....	3,548.	3,498.	101.4
1884.....	3,713.	3,592.	103.4
1885.....	3,591.	3,437.	104.4
1886.....	3,897.	3,724.	104.6
1887.....	3,968.	3,700.	107.4
1888.....	4,023.	3,817.	105.4
1889.....	4,193.	4,027.	104.1
1890.....	4,351.	4,199.	103.2
1891.....	4,926.	4,500.	109.5
1892.....	4,765.	4,505.	109.3
1893.....	5,105.	4,943.	103.3
1894.....	5,129.	4,856.	105.6
1895.....	5,136.	4,746.	108.2
1896.....	5,461.	5,289.	103.3
1897.....	5,493.	5,302.	103.5
1898.....	5,443.	5,287.	102.9
1899.....	5,591.	5,240.	106.7
1900.....	5,625.	5,459.	103.0
1901.....	5,944.	5,348.	111.1
1902.....	5,776.	5,451.	106.0
1903.....	5,975.	5,806.	102.9
51 years.....	178,411	169,308	105.3

SEASON AND MORTALITY.

The whole number of decedents, and the sex of the same, in each month of the year 1903, and in each division of the State, may be found in Table V, on the tenth and eleventh pages.

The influence of season upon mortality may be further illustrated by the following table, which shows the number and percentage of deaths, compared with the whole number of deaths, in each quarter of each of the last five years, and in the aggregate for fifty-one years, 1853 to 1903, inclusive:

TABLE L.

SEASON.	1903.		1902.		1901.		1900		1899.		51 years, 1853-1903.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
January-March	2,364	27.35	1,987	24.98	2,179	27.35	2,400	27.20	2,043	27.39	59,604	24.78
April-June. . . .	2,025	23.43	1,833	23.04	1,761	22.11	2,220	25.16	1,699	22.78	53,210	22.12
July-September.	2,309	26.72	2,149	27.01	2,162	27.14	2,315	26.24	2,053	27.53	68,512	28.48
October-Dec. . . .	1,944	22.50	1,986	24.97	1,864	23.40	1,888	21.40	1,663	22.30	59,217	24.62
Total.	8,642	100.00	7,955	100.00	7,966	100.00	8,823	100.00	7,458	100.00	240,543	100.00

Comparing the percentages of 1903 with those of the fifty-one years, we find that of the first quarter is 2.57 per cent. larger; the second quarter is 1.31 per cent. larger; the third quarter 1.76 per cent. less; and the last quarter 2.12 per cent. less than for the average of the fifty years. The greatest mortality for any one season of any year has been usually found in the third quarter.

TABLE II.

Showing the Months in the Order of Largest Mortality for Eight Years.

1903.	1902.	1901.	1900.	1899.	1898.	1897.	1896.
July..... 825	August.... 767	March 761	April 988	January... 785	August.... 730	August.... 735	July..... 836
January... 812	December.. 758	January... 742	March..... 915	August.... 752	September. 673	February.. 721	August.... 810
August.... 789	July..... 712	August.... 735	August.... 829	July..... 717	July..... 595	September. 647	March..... 635
February... 782	March..... 680	July..... 732	July..... 823	March.... 638	December.. 585	July..... 642	April..... 634
March.... 770	September. 670	September. 695	February.. 752	December.. 636	March..... 582	March..... 619	May..... 626
April..... 726	January... 665	February.. 676	January... 733	April..... 634	April..... 576	January.... 597	January.... 617
December... 700	April..... 648	October.... 648	December.. 678	February.. 620	May..... 568	October... 572	June..... 596
September... 695	February.. 642	April.... 638	September. 663	September. 584	October.... 543	December , 559	February.... 581
May..... 694	May..... 637	December. 635	May..... 645	May..... 547	January... 540	April..... 538	September... 566
October... 653	October.... 622	May.... 596	October.... 629	November. 522	November. 509	May..... 520	December... 561
June..... 605	November. 606	November. 581	June..... 587	June..... 518	February.. 505	June..... 482	October.... 556
November... 591	June..... 548	June..... 527	November. 581	October... 505	June..... 499	November. 478	November... 486
8,642	7,955	7,966	8,823	7,458	6,905	7,110	7,504

NATIVITY OF DECEDENTS.

There may be found in Table 1, on pages 2-5, the number of decedents in 1903, by division of the two classes of native and foreign born.

Of the whole number of decedents, 8,642, 6,148 were native born, that is, were born in the United States, and 2,494 were born outside of the United States.

PARENTAGE OF DECEDENTS.

Of the whole number of decedents, 8,642, reported in 1903, 3,434 were of native and 5,208 were of foreign and unknown parentage.

By the term "foreign *parentage*" is meant the decedents whose *fathers* were born in some other country and not in the United States. The grandchildren of the foreign born are reckoned as of native parentage, if their fathers were born in the United States.

The following thirteen towns reported a larger number of decedents of foreign *parentage* than of native, namely: Bristol, Warren, Warwick, Tiverton, Burrillville, Central Falls, Cumberland, Johnston, Lincoln, North Providence, Pawtucket, Providence, and Woonsocket; also the State Institutions at Crantson.

These numbers varied from a moderate excess to three or four times as many of foreign as of native *parentage*.

The following table gives the number and proportion in every one thousand deaths of decedents of native and of foreign *parentage* in each of the last five years; and in the aggregate for forty-five years, or from 1858 to 1902, inclusive:

TABLE LII.

PARENTAGE.	1903.		1902.		1901.		1900.		1899.		45 years, 1859-1902.	
	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.
Native.....	3,434	397.4	3,247	408.2	3,264	409.7	3,745	424.5	3,097	415.0	120,218	489.5
Foreign.....	5,208	602.6	4,708	591.8	4,702	590.3	5,078	575.5	4,361	585.0	125,395	510.5
Total.....	8,642	1000.0	7,955	1000.0	7,966	1000.0	8,823	1000.0	7,458	1000.0	245,613	1000.0

AGE OF DECEDENTS.

In Table 1, on pages 2-5, may be found the aggregate and average age of all the decedents whose deaths occurred in 1903, and with the age of each sex in each town and county in the State.

By that table it will be seen that the average age of all the male decedents in the State, in 1903, was 32.94 years, and that the average age of all the female decedents, in the same year, was 35.96 years; the average of all decedents, of both sexes, was 34.40 years.

The average age of the total decedents in the State, in 1903, was one and nine one-hundredths of a year less than the average for 1902.

The average age of the male decedents, in 1903, was one and thirty-eight one-hundredths of a year less, and the average age of the female decedents was seventy-four one-hundredths of a year less, than in the previous year.

The following table will present, separately, the average age of the male and female decedents, and the average age of all decedents, in each year for forty-three years; also the average age in seven periods of five years each, from 1861 to 1900, inclusive:

TABLE LIII.

YEARS.	Average Age of Males.	Average Age of Females.	Average Age of All.	Average Age, 5-year periods, 1861-1900.
1861..	26.95	30.58	28.82	29.32
1862..	29.61	32.65	31.15	
1863..	28.29	30.86	29.56	
1864..	28.13	30.43	29.40	
1865..	26.38	28.97	27.69	
1866..	31.13	35.07	33.09	32.42
1867..	32.16	35.86	34.01	
1868..	30.47	35.08	32.85	
1869..	28.62	31.29	30.25	
1870..	31.02	32.75	31.90	
1871..	32.57	34.43	33.52	30.16
1872..	28.41	31.15	29.77	
1873..	26.48	28.62	27.42	
1874..	28.03	31.66	28.86	
1875..	29.72	32.75	31.27	
1876..	31.47	33.21	32.37	31.21
1877..	29.25	31.56	30.45	
1878..	29.02	31.11	30.09	
1879..	31.29	33.24	32.29	
1880..	29.62	32.06	30.86	
1881..	30.99	34.07	32.55	33.99
1882..	31.33	35.57	33.50	
1883..	33.64	37.44	35.55	
1884..	32.29	35.12	33.76	
1885..	33.53	35.60	34.59	
1886..	33.02	34.91	34.01	33.42
1887..	30.97	32.91	31.95	
1888..	33.17	35.74	34.53	
1889..	32.20	35.74	34.00	
1890..	31.04	34.26	32.62	
1891..	32.70	36.28	34.47	33.96
1892..	32.96	37.75	35.34	
1893..	30.97	33.99	32.46	
1894..	32.47	34.40	33.44	
1895..	31.70	36.49	34.08	
1896..	30.86	34.47	32.61	34.53
1897..	33.71	37.06	35.37	
1898..	34.34	36.34	35.31	
1899..	34.04	37.30	35.67	
1900..	31.81	35.58	33.67	
1901..	35.01	38.07	36.51	
1902..	34.32	36.70	35.49	
1903..	32.94	35.96	34.40	

The above table shows that the average longevity of the decedents in Rhode Island increased over five years during a period of forty years, ending with 1900.

The following table will present some of the facts of the preceding as occurring in the different divisions of the State, as well as of the State at large. It will show the average age of the decedents in each of the larger divisions of the State, in each of the last three years, and also the average of each of eight periods of five years each, comprising the forty years from 1863 to 1902, inclusive:

TABLE LIV.

DIVISIONS OF THE STATE.	1903.	1902.	1901.	1898-1902, 5 years.	1893-1897, 5 years.	1888-1892, 5 years.	1883-1887, 5 years.	1878-1882, 5 years.	1873-1877, 5 years.	1868-1872, 5 years.	1863-1867, 5 years.
Bristol County.....	38.83	40.38	45.36	39.74	42.78	39.76	38.45	36.68	33.61	35.12	34.78
Kent County.....	33.27	33.65	35.49	32.97	31.07	32.22	37.66	37.11	36.20	34.77	35.81
Newport County.....	40.91	37.90	39.31	39.94	39.98	40.63	42.41	39.21	40.68	40.04	33.51
Providence County*....	32.36	33.10	33.24	33.14	30.79	31.63	31.83	30.60	28.46	25.26	29.16
Providence City.....	32.57	34.12	35.47	33.91	32.03	33.44	32.19	29.50	27.19	25.45	28.50
Washington County.....	45.64	53.06	49.92	49.70	46.55	46.77	43.39	41.01	41.14	39.67	30.87
Whole State.....	34.40	35.49	35.61	35.15	33.59	34.19	33.97	31.86	30.28	31.66	30.73

By reference to Table LIV, it will be seen that the average age of all decedents during the last five years is more than four years greater than the first period of five years, 1863-1867.

PERCENTAGE OF DECEDENTS BY DIFFERENT AGES.

In Table VI, on pages 12 to 19, inclusive, will be found the number of deaths in 1903, in each town and each county, of each sex, and in each period of life, with the percentage of the whole number of deaths in each division to the population of the same, geometrically estimated from the census of 1900.

The following table shows the percentage of decedents in each division of ages, to whole number of deaths, in each of the last five years, and in the aggregate for four periods: one of twenty years and seven months, from June 1st, 1852, to December 31, 1872, inclusive; one of ten years, from 1873 to 1882, inclusive; one of ten years, from 1883 to 1892, inclusive; and one of ten years, from 1893 to 1902, inclusive:

*Exclusive of Providence city.

TABLE LV.

PERIODS OF LIFE.	1903.	1902.	1901.	1900.	1899.	10 years, 1893 to 1902.	10 years, 1883 to 1892.	10 years, 1873 to 1882.	20 years, 7 months, 1852 to 1872.
Under 1 year.....	22.3	23.3	21.1	23.4	22.7	22.8	20.4	18.9	17.8
1 and under 2.....	5.9	4.5	4.9	5.7	5.1	5.0	5.6	7.6	8.8
2 and under 5	4.9	4.0	4.1	5.1	4.2	4.8	5.8	8.4	8.7
Total.....	33.1	31.8	30.1	34.2	32.0	32.6	31.8	34.9	35.3
5 and under 10.....	2.8	2.3	2.3	2.8	2.1	2.8	3.5	5.0	4.8
10 and under 20.....	3.3	3.8	3.8	3.6	3.7	4.1	5.1	5.8	6.0
20 and under 30.....	7.1	7.6	8.2	7.7	7.2	8.0	8.7	9.2	9.6
30 and under 40.....	7.9	7.8	7.8	7.2	8.4	7.8	7.9	7.8	8.4
40 and under 50.....	8.0	7.9	9.0	7.7	7.9	8.1	7.5	6.9	7.3
50 and under 60.....	9.9	10.2	10.3	9.9	9.7	9.4	8.5	7.2	7.0
60 and under 70.....	11.4	11.1	11.5	10.5	11.1	10.7	9.7	8.2	7.6
70 and under 80.....	9.6	10.8	10.4	10.1	11.2	10.1	9.3	8.8	7.2
80 and under 90.....	5.7	5.7	5.6	5.4	5.6	5.4	5.9	5.1	5.1
Over 90 and not stated....	1.2	1.0	1.0	0.9	1.1	1.0	1.5	1.1	1.1
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Compared with the average of twenty years, ending with 1872, the average proportion of the mortality of children under one year of age, during the last ten years, was 5 per cent., or 50 in every one thousand deaths more than the average in the longer period.

The proportions in the other periods were not greatly different from previous years, although there was some increase of percentage in the age period above fifty years.

The following table will present the varying proportions of deaths to whole number of deaths, in four different periods of life, from 50 years of age to 90 years, grouped in five periods of averages of ten years each, 1853-1902; also in 1899, 1900, 1901, 1902, and 1903:

TABLE LVI.

AGE OF DECEDENTS.	1st Decade, 1853-1862.	2d Decade, 1863-1872.	3d Decade, 1873-1882.	4th Decade, 1883-1892.	5th Decade, 1893-1902.	1899.	1900.	1901.	1902.	1903.
	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>	<i>Pr. ct.</i>
50 to 60.....	6.7	7.3	7.2	8.5	9.4	9.7	9.9	10.3	10.2	9.9
60 to 70.....	6.9	8.3	8.2	9.7	10.7	11.1	10.5	11.5	11.1	11.4
70 to 80.....	7.3	8.4	8.8	9.9	10.1	11.2	10.1	10.4	10.8	9.6
80 to 90.....	4.6	5.4	5.1	5.9	5.4	5.6	5.4	5.6	5.7	5.7

COLORED DECEDENTS.

There were 279 deaths of persons of color during 1903.

The towns from which they were returned, and number in each, were as follows:

Providence City.....	170
Bristol.....	2
Warren.....	1
East Greenwich.....	5
Warwick.....	5
Jamestown.....	2
Newport City.....	38
Portsmouth.....	1
State Institutions.....	17
East Providence.....	4
Johnston.....	2
Pawtucket.....	4
Charlestown.....	3
Hopkinton.....	2
Narragansett.....	1
North Kingstown.....	3
South Kingstown.....	12
Richmond.....	3
Westerly.....	4
Total.....	279

Months.	Deaths.	Months.	Deaths.	Months.	Deaths.	Months.	Deaths.
January.....	21	April.....	19	July.....	28	October.....	21
February.....	31	May.....	23	August.....	31	November.....	21
March.....	29	June.....	19	September.....	20	December.....	16
	—		—		—		—
First Quarter.....	81	Second Quarter.....	61	Third Quarter.....	79	Fourth Quarter.....	58

First six months, 142; second six months, 137. Total, 279.

The following summary will show the proportion, to the whole colored population, of each of the events of birth, marriage, and death of colored persons, during the twenty-six years from 1878 to 1903, inclusive:

	One Birth in every	One Person Married in every	One Death in every
1878.....	36.4.....	39.2.....	40.2.....
1879.....	39.6.....	51.4.....	37.3.....
1880.....	47.1.....	43.3.....	44.0.....
1881.....	34.3.....	39.2.....	35.4.....
1882.....	36.8.....	44.5.....	45.4.....
1883.....	33.4.....	63.3.....	39.7.....
1884.....	34.8.....	46.0.....	34.5.....
1885.....	36.7.....	51.7.....	40.1.....
1886.....	34.6.....	43.2.....	37.8.....
1887.....	35.8.....	38.9.....	37.2.....
1888.....	37.6.....	55.0.....	38.0.....
1889.....	38.7.....	52.0.....	40.0.....
1890.....	45.3.....	57.6.....	41.0.....
1891.....	42.8.....	41.2.....	36.4.....
1892.....	40.6.....	38.5.....	31.3.....
1893.....	38.6.....	41.2.....	31.3.....
1894.....	34.3.....	56.6.....	34.2.....
1895.....	35.9.....	42.6.....	32.1.....
1896.....	35.1.....	38.9.....	37.9.....
1897.....	38.5.....	36.0.....	41.3.....
1898.....	37.9.....	48.2.....	41.8.....
1899.....	39.1.....	41.7.....	36.0.....
1900.....	39.5.....	37.4.....	37.7.....
1901.....	35.5.....	41.3.....	35.5.....
1902.....	43.2.....	39.3.....	37.5.....
1903.....	43.9.....	36.8.....	32.7.....

In every one thousand of the colored population there were, in 1903:

Of Births.	Of Persons Married.	Of Deaths.
22.8	27.2	31.6

The following exhibit will show the number of living births, marriages, and deaths among the colored population of Rhode Island, during ten years, from 1861 to 1870, inclusive; ten years, from 1871 to 1880, inclusive; ten years, from 1881 to 1890, inclusive; ten years, from 1891 to 1900, inclusive; for the years 1901 and 1902 and the aggregate of the same:

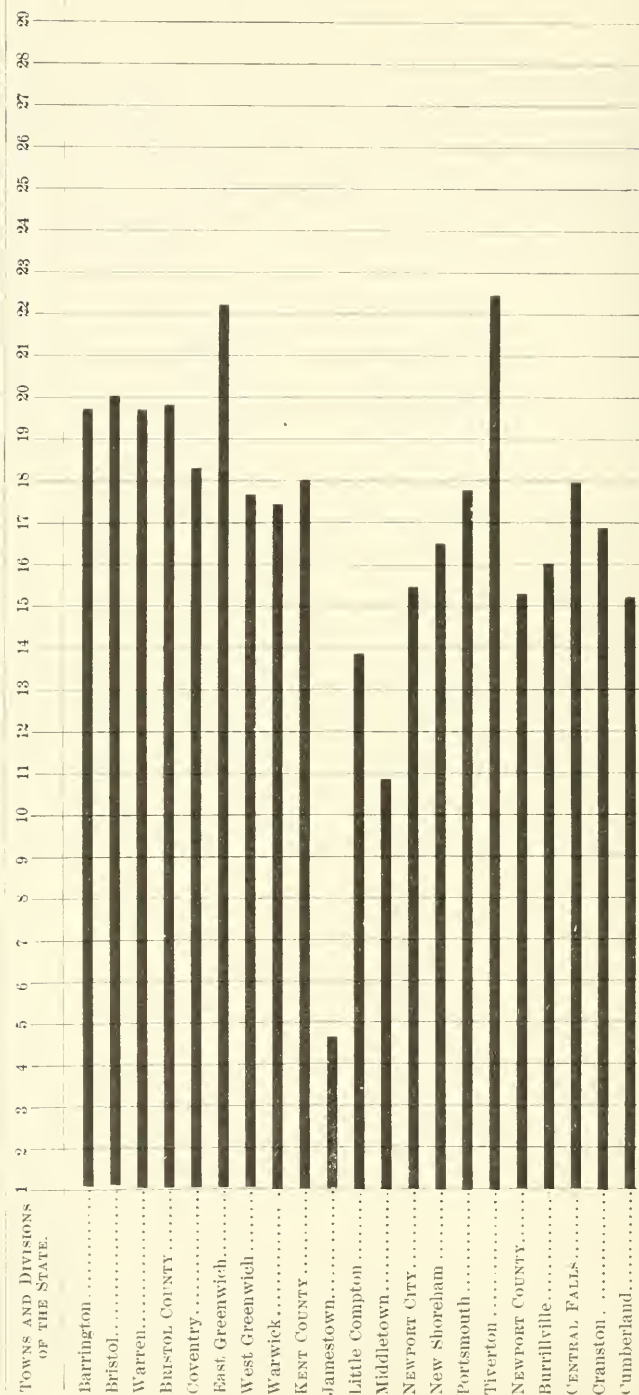
10 years, 1861-1870.	1,131 births.	557 marriages.	1,153 deaths.
10 years, 1871-1880.	1,615 births.	705 marriages.	1,573 deaths.
10 years, 1881-1890.	1,954 births.	752 marriages.	1,860 deaths.
10 years, 1891-1900.	2,080 births.	957 marriages.	2,218 deaths.
1901	252 births.	103 marriages.	257 deaths.
1902	211 births.	116 marriages.	243 deaths.
1903	208 births.	124 marriages.	279 deaths.
<hr/>			
Total, 43 years.	7,451 births.	3,314 marriages.	7,583 deaths.

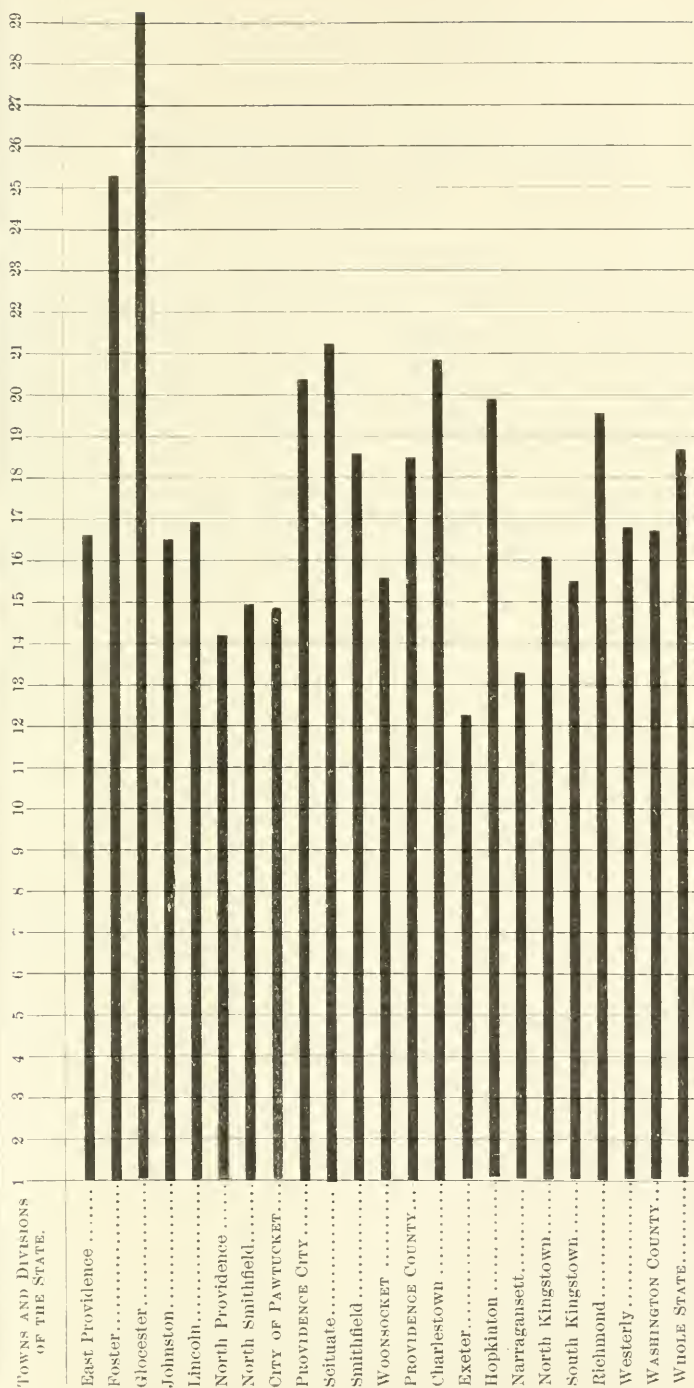
During the first ten years (1861-1870) there were 22 more deaths than births; during the second ten (1871-1880), 42 more births than deaths; during the third ten (1881-1890), 94 more births than deaths; and in the last ten (1891-1900), 138 more deaths than births. During 1901 the number of births was 5 less than the number of deaths, in 1902 the number of births was 32 less than the number of deaths, and in 1903 the number of births was 71 less than the number of deaths.

DEATH RATES.

Diagram I.—Showing the Number of Deaths in every 1,000 of the Population, in each Town and each County in the State, during the Year 1903, computed upon an estimated increase of the Population by the Census of 1900.

For explanation see foot-note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of deaths during the year in every 1,000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington, at the top of this diagram, reaches across seven-tenths of the space between the perpendicular lines 19 and 20. It shows the death rate of Barrington, in 1903, was nineteen and seven-tenths in every 1,000 of the population.

CAUSES OF DEATH, 1903.

The statistics of the causes of death in Rhode Island, in 1903, may be found in Tables VII, VIII, IX, and X. The whole number of deaths, as previously stated, was 8,642, which was 687 greater than the number returned in 1902 and 676 greater than the number reported in 1901. The number of which the cause of death was reported was 8,600, and the number of which the cause was not stated was 42.

The following Table shows the number of deaths, in 1903, in each large division of the State, and the number and proportion in each division from which causes were reported unknown:

TABLE LVII.

	Bristol County.	Kent County.	Newport County Towns.	Providence County Towns.	Washington County.	Newport City.	Central Falls.	Pawtucket.	Providence City.	Woonsocket.	Whole State.
Number of deaths	277	570	174	1,464	411	359	339	664	3,895	489	8,642
Cause not stated.	1	....	1	6	3	3	1	1	29	1	42
One in	277	....	174	244	137	120	339	664	156	489	206

TABLE LVIII.

Proportion of Deaths reported with "Causes Unknown" in each Division of the State, for a period of forty-eight years, from 1856 to 1903, inclusive.

YEARS.	STATE DIVISIONS.							In every 1,000 Deaths.
	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.	Whole State.	
1856-1860, One in every...	18.1	5.0	7.2	5.5	30.7	7.3	9.4	106.8
1861-1865, One in every...	32.1	13.1	16.1	7.9	39.3	23.7	15.1	66.0
1866-1870, One in every...	83.9	8.9	26.7	7.1	61.8	16.4	14.1	70.9
1871-1875, One in every...	38.6	8.6	13.1	9.9	83.4	13.6	17.1	58.4
1876, One in every.....	11.5	7.9	18.5	9.9	124.3	22.8	19.3	45.8
1877, One in every.....	201.0	17.7	9.7	11.9	323.0	16.0	23.2	43.1
1878, One in every.....	32.1	7.4	9.0	13.7	124.2	21.7	21.1	47.4
1879, One in every.....	16.6	9.2	12.4	9.5	225.1	8.6	17.6	56.8
1880, One in every.....	21.9	23.5	13.5	10.5	122.3	17.8	20.7	48.3
1876-1880, One in every...	31.9	17.2	19.9	18.1	39.6	26.9	25.2	39.7
1881, One in every.....	204.0	13.0	11.2	7.3	143.0	6.5	14.4	69.4
1882, One in every.....	37.6	11.6	10.9	10.6	187.0	7.7	18.8	53.2
1883, One in every.....	40.4	15.9	15.0	15.3	392.8	17.0	28.4	36.2
1884, One in every.....	100.0	40.0	81.6	91.7	372.1	90.4	122.1	8.2
1885, One in every.....	185.0	355.0	137.0	45.6	309.1	52.2	91.3	10.9
1881-1885, One in every...	75.4	20.1	18.8	15.7	212.2	14.0	28.6	34.9
1886, One in every.....	110.5	192.5	86.0	87.0	195.1	55.2	113.7	7.3
1887, One in every.....	212.0	343.0	73.5	782.6	264.0	351.0	333.7	3.0
1888, One in every.....	251.0	408.0	152.7	164.3	293.8	368.0	235.7	4.3
1889, One in every.....	208.0	152.0	221.0	176.7	120.0	338.0	160.0	6.2
1890, One in every.....	.....	.....	236.0	109.0	190.0	159.0	161.0	6.2
1886-1890, One in every...	576.0	413.0	125.1	154.8	189.0	171.2	177.6	5.6
1891, One in every.....	.....	.....	598.0	159.0	175.0	154.0	194.0	5.1
1892, One in every.....	.....	.....	591.0	240.0	212.0	184.0	264.0	3.8
1893, One in every.....	228.0	96.3	61.2	70.2	224.0	307.0	109.9	9.1
1894, One in every.....	.....	192.3	173.0	91.6	144.9	402.0	130.2	7.7
1895, One in every.....	.....	522.0	122.7	280.6	90.9	123.7	144.9	6.9
1891-1895, One in every...	1,155.0	277.5	159.6	126.5	151.8	195.2	152.5	6.6
1896, One in every.....	.....	116.6	.....	707.5	155.6	382.0	258.8	3.9
1897, One in every.....	231.0	536.0	127.7	139.5	187.4	.....	284.4	3.5
1898, One in every.....	.....	172.0	164.6	596.2	366.1	184.5	345.2	2.9
1899, One in every.....	125.3	287.0	188.0	636.7	351.3	180.0	339.0	2.9
1900, One in every.....	297.0	354.0	305.0	281.0	282.9	109.8	267.3	3.7
1896-1900, One in every...	302.8	224.4	225.9	500.1	242.8	213.3	293.0	3.4
1901, One in every.....	240.0	200.3	182.3	195.7	181.3	197.0	190.0	5.3
1902, One in every.....	250.0	.....	67.3	336.5	82.8	319.0	135.0	7.4
1903, One in every.....	277.0	.....	76.1	328.4	95.0	137.0	205.8	4.9

*Not including Providence city.

TABLE LIX.
Exhibiting the Order in regard to Number and Proportion of Decedents from Thirteen Principal Causes of Death.

1903.	1902	1901.	1900.	1899.	1898.	January 1st, 1888 to January 1st, 1897 —10 years.	June 1st, 1852, to Decem- ber 31-st, 1887 — 35 years, 7 months.	Per 1,000 of Whole Number of Deaths, 7 months.
Whole No. 8,642	Whole No. 7,955	Whole No. 7,966	Whole No. 8,823	Whole No. 7,458	Whole No. 6,905	Whole No. 70,552	Whole No. 129,231	.....
Tuberculosis, Pulmonary, 840	Consumption, 934	Consumption, 990	Consumption, 987	Consumption, 972	Consumption, 886	Consumption, 7,767	Consumption, 19,847	151.3
Other Tubercu- lous Dis. 181								
Pneumonia, 870	Pneumonia, 715	Pneumonia, 742	Pneumonia, 966	Pneumonia, 686	Heart Dis. 549	Pneumonia, 6,213	Pneumonia, 8,298	64.5
Heart Dis. 726	Heart Dis. 704	Heart Dis. 685	Heart Dis. 701	Heart Dis. 648	Pneumonia, 542	Cholera Inf'm. 5,193	Cholera Infantum. 6,821	53.1
Cholera Inf'm*, 638	Cholera Inf'm*, 611	Kidney Dis. 505	Cholera Inf'm, 557	Kidney Dis. 477	Kidney Dis. 471	Heart Dis. 1,959	Old Age, 6,797	53.0
Kidney Dis. 617	Kidney Dis. 535	Apoplexy, etc. 499	Kidney Dis. 516	Cholera Inf'm 473	Cholera Inf'm, 468	Apoplexy, 3,885	Heart, Dis. of, 5,642	43.6
Apoplexy, 394	Apoplexy, 476	Cholera Inf'm 401	Apoplexy, 506	Apoplexy, 457	Apoplexy, 416	Kidney Dis. 2,893	Dysentery and Diar- rhea, 5,166	40.1
Accidents, 376	Cancer, 341	Accidents, 346	Accidents, 336	Cancer, 292	Brain Dis. 327	Bronchitis, 2,663	Apoplexy and Par- alysis, 5,050	39.2
Cancer, 350	Accidents, 317	Enteritis, 343	Bronchitis, 295	Accidents, 276	Accidents, 296	Accidents, 2,548	Scarlet Fever, 4,974	38.5
Bronchitis, 265	Brain Dis. 268	Cancer, 306	Cancer, 292	Brain Dis. 267	Cancer, 279	Brain Dis. 2,449	Fevers, Typhoid, etc. 4,632	36.1
Old Age, 231	Old Age, 261	Brain Dis. 281	Brain Dis. 290	Bronchitis, 241	Bronchitis, 236	Old Age, 2,088	Accidents, all kinds, 3,921	30.3
Brain Dis. 204	Bronchitis, 259	Old Age, 234	Influenza, 255	Old Age, 228	Enteritis, 233	Cancer, 2,038	Diphtheria, 3,777	29.2
Diphtheria, 189	Diphtheria, 148	Bronchitis, 222	Old Age, 250	Influenza, 219	Old Age, 205	Diphtheria, 1,921	Convulsions, 2,859	22.1
Whooping Cough 164	Enteritis, 146	Diphtheria, 177	Enteritis, 233	Enteritis, 212	Diphtheria, 93	Fever, Typhoid 1,315	Croup, 2,461	19.1

*Includes Enteritis under 2 years of age.

130 years, 1858 to 1887, inclusive.

The number of deaths from consumption, in 1903, was 87 greater than in 1902.

From pneumonia there was an increase of 155 deaths over that of the previous year. The fatality from pneumonia has been slowly increasing, in proportion to whole number of deaths, for the last twenty years.

From diseases of the heart there was an increase of 22 deaths from 1901. Diseases of the heart have been steadily increasing as causes of death, the mortality in 1903 being the largest ever recorded in this State.

From kidney diseases there was an increase of 82 from the number in 1902.

There were 350 deaths from cancer in 1903, an increase of 9 over the number in 1902.

COMPARATIVE STATISTICS AND COMMENTS.

There have been presented in the preceding pages, numerically and in tabular form, the different causes of death in Rhode Island, in 1903, with various summaries and illustrations. In Tables VII and VIII they were presented at considerable length, in various specific terms; in Table IX more or less grouped in a general nosological arrangement; and in Table X the same for a period of fifty-one years.

In Table VII the number of deaths from *each cause* and of *each sex* is shown, for *each month* in the year, and the *nativity* and *parentage* of the decedents from *each cause* during the year.

In Table VIII the number of decedents of *each sex*, from *each cause*, in the *different periods of life*, is given.

In Table IX, with the International classification and percentage of causes of death, the number of each general cause, in each division of larger population, is given.

In Table X a nosological summary of causes of death for the whole State, in each of fifty-one years, is given, arranged by the International system.

Table LX is a compend, in part, of Tables VII, VIII, and IX, previously alluded to, and contains the particulars of the most important causes of death in 1903, and comprises the principal causes which will be commented upon in the following pages:

TABLE LX.
Deaths in Rhode Island from Twenty-six Principal Causes.

	All Tuberculous Diseases.	Pulmonary Tuberculosis	Other Tuberculous Diseases.	Pneumonia.	Heart Diseases.	Cholera Infantum.*	Kidney Diseases.	Apoplexy.	Accidents.	Cancer.	Bronchitis.	Old Age.	Brain Diseases.	Diphtheria.†	Whooping Cough.	Stomach Diseases.	Influenza.	Enteritis.†	Measles.	Liver Diseases.	Dysentery.	Typhoid Fever.	Diabetes.	Appendicitis.	Scarlet Fever.	Rheumatism.	Pneum.	Group.
TOTAL MORTALITY.....	1,021	840	181	870	726	638	617	394	376	350	265	231	204	189	164	157	142	139	133	120	96	86	75	63	60	37	26	8
SEX.....																												
{ Males.....	543	439	104	425	375	355	347	169	276	121	128	98	103	96	70	87	61	58	68	79	55	47	33	34	34	22	7	4
{ Females.....	478	401	77	445	351	283	270	225	100	229	137	133	101	93	94	70	81	81	65	41	41	39	42	29	26	15	19	4
PARENTAGE.....																												
{ Native.....	319	241	78	301	313	209	271	204	135	153	79	131	74	73	79	63	68	51	41	37	38	27	40	30	23	22	12	...
{ Foreign.....	702	599	103	569	413	429	346	190	241	197	186	100	130	116	85	94	74	88	92	83	58	59	35	33	37	15	14	8
SEASON.....																												
{ January.....	84	70	14	120	80	12	52	47	30	30	35	32	16	24	43	12	9	4	8	11	...	9	3	5	3	4	5	...
{ February.....	89	70	19	131	58	16	56	36	26	24	47	23	9	10	29	9	33	5	11	11	2	2	2	9	3	8	1	...
{ March.....	91	79	12	118	52	12	46	31	34	27	35	20	26	17	25	11	61	5	14	6	3	6	1	5	3	2	1	2
{ April.....	94	80	14	81	72	8	51	33	25	26	27	20	16	13	32	12	18	5	18	15	1	6	7	5	7	3	4	3
{ May.....	96	77	19	84	66	15	47	28	35	33	25	20	20	14	11	13	7	5	23	11	4	9	11	2	11	3	2	2
{ June.....	72	60	12	51	49	49	47	30	31	30	11	11	12	9	9	12	2	10	26	9	4	4	5	8	13	2	...	1
{ July.....	89	68	21	38	57	163	49	27	34	21	14	22	27	22	4	17	...	32	12	6	20	11	5	7	4	6	6	...
{ August.....	87	67	20	17	76	149	40	28	43	31	7	15	17	10	1	17	...	40	10	6	35	7	9	13	3	3	1	...
{ September.....	85	68	17	25	48	120	46	37	33	38	13	26	19	13	...	11	1	14	3	12	16	9	8	3	3	1	2	...
{ October.....	82	67	15	49	41	54	62	25	27	31	14	16	9	18	3	15	...	13	4	11	5	9	2	4	2	4	2	...
{ November.....	77	66	11	51	61	26	68	27	29	29	15	10	14	14	4	14	4	3	3	12	4	6	4	3	2	5	1	...
{ December.....	75	68	7	105	66	14	53	45	29	30	22	16	19	25	3	14	7	3	1	10	2	8	11	5	1	3	1	...

* Includes Diarrheal Diseases under 2 years.

† Includes Membranous Group.

‡ Includes Diarrheal Diseases over 2 years.

TABLE LX.—Concluded.

All Tuberculous Diseases.	Pulmonary Tuberculosis.	Other Tuberculous Diseases.	Pneumonia.	Heart Diseases.	Cholera Infantum.*	Kidney Diseases.	Apoplexy.	Accidents.	Cancer.	Bronchitis.	Old Age.	Brain Diseases.	Diphtheria.†	Whooping Cough.	Stomach Diseases.	Influenza.	Enteritis.‡	Measles.	Liver Diseases.	Dysentery.	Typhoid Fever.	Diabetes.	Appendicitis.	Scarlet Fever.	Rheumatism.	Pleurisy.	Group.				
AGES.	Under 5 years.....	146	40	106	338	7	638	24	...	58	...	166	...	100	125	161	...	24	38	115	4	49	3	1	2	26	1	5	7		
	5 to 10 years.....	17	4	13	23	8	7	...	22	1	4	...	9	54	2	5	2	9	13	...	7	10	...	...	7	22	2	1	1
	10 to 15 years.....	15	2	3	5	7	3	...	15	...	1	...	3	6	...	1	2	3	2	...	...	...	7	1	9	5	2	...	...
	15 to 20 years.....	66	57	9	15	8	18	2	20	...	1	...	5	3	...	1	1	2	...	...	...	1	7	1	8	5	2	...	...
	20 to 30 years.....	254	238	16	41	31	52	7	55	6	3	...	7	1	...	4	6	8	2	4	3	23	6	14	1	4	1	...	...
	30 to 40 years.....	224	214	10	72	34	61	10	60	17	3	...	12	...	1	6	7	4	1	14	4	27	6	10	1	7	2	...	...
	40 to 50 years.....	137	131	6	70	73	62	35	45	78	9	...	20	...	...	6	12	1	2	23	2	2	2	4	...	7	3	...	...
	50 to 60 years.....	90	82	8	77	138	119	66	29	85	12	...	11	...	...	12	10	13	...	27	7	5	19	4	4	5	...	...	...
	60 to 70 years.....	50	44	6	99	188	117	100	28	91	23	...	24	...	...	14	21	18	...	28	5	2	26	5	...	1	3	...	...
	70 to 80 years.....	16	14	2	84	156	102	103	18	53	19	...	10	9	30	22	...	16	10	...	7	4	1	
	80 years and over.....	6	4	2	43	75	50	70	24	19	18	...	2	13	27	11	...	4	6	...	6	2	3	
	Not stated.....	3	1	...	2	1	2	...	6	...	1	2	1	
LOCALITIES.	Bristol County.....	27	23	4	19	26	29	24	22	16	11	3	14	2	5	6	7	9	5	2	2	...	2	1	4	6	1	...	...
	Kent County.....	45	39	6	45	41	53	39	33	27	21	15	21	14	12	15	10	6	6	15	8	7	11	4	1	6	...	4	6		
	Newport County Towns.....	13	10	3	19	17	12	10	8	8	3	7	6	3	2	3	1	3	1	1	1	1	1	2	...	1	1	
	Newport City.....	42	37	5	28	29	12	29	34	16	16	4	29	9	13	...	3	...	1	10	...	4	6	4	1	1	3	
	Providence County Towns.	183	156	27	137	129	90	97	73	61	74	35	56	69	24	30	26	31	31	13	17	23	11	12	4	5	7	3	
	Central Falls.....	35	32	3	46	20	45	20	15	7	28	7	10	4	9	10	5	4	1	3	1	2	1	6	3	
	Pawtucket.....	77	71	6	66	60	55	57	33	28	21	26	20	23	13	9	18	13	14	3	9	5	7	3	4	3	...	1	
	Providence City.....	502	386	116	414	325	273	287	143	171	154	127	51	56	82	77	61	65	61	93	56	47	39	36	39	24	21	11	
	Woonsocket.....	70	62	8	54	30	54	25	11	18	7	19	9	10	27	12	9	2	6	...	4	10	1	4	2	8	1	1	2
	Washington County.....	27	24	3	42	49	15	29	22	24	31	5	17	5	6	4	10	10	8	5	10	2	8	7	4	...	2

* Includes Diarrheal Diseases under 2 years.

† Includes Membranous Croup.

‡ Includes Diarrheal Diseases over 2 years.

DEATHS FROM ACCIDENTS.

The number of deaths from accidental causes in Rhode Island, in 1903, was 376.

Among the deaths from accidents there were 31 from asphyxia; 3 by bicycle; 34 by burns and scalds; 72 by drowning; 12 by electric car; 4 by electrical shocks; 2 by elevator; 5 by exposure to cold and storm; 79 by falls; 5 by firearms; 7 from heat; 1 by lightning; 5 by machinery; 10 by poison; 52 by railroad; and 54 by various other accidents.

Asphyxia.—By bedclothes or overlaying, 7 (infants); by illuminating gas, 17 (adults); by gas from coal stove, 1 (adult); by marsh gas in manhole of wool-washing refuse pit, 2 (adults); by fumes of anhydrous hydrocyanic acid, 1 (adult); by food in trachea, 2 (infant and adult); by drawing-string being drawn too tightly about neck, 1 (infant). Total, 31.

Bicycle.—By bicycle collision, 2; over a twelve-foot bank wall, 1. Total, 3 (ages 12, 17, and 22 years).

Burns and Scalds.—By brush-fire, 5 (3 children and 2 adults); playing with matches, 6; by clothes taking fire from stove, 4 (2 children and 2 adults); explosion of kerosene (overturned lamps), 3 (adults); explosion of torch filled with gasoline, 1; by bedclothes catching fire from smoking cigarette, 1; in burning house, 3 (ages 39, 44, and 75 years); in some manner unknown, 1 (age 2 years); scalded by hot water, 5 (children); by fall into scouring tub of boiling water in dyeing establishment, 1 (age 61 years); by bursting of steampipe in bleachery, 3 (adults); by falling into dish of hot macaroni, 1 (age 4 years). Total, 34.

Drowning.—While bathing or swimming, 7 (ages 8, 12, 13, 15, 16, 35, and 43 years); through ice, 8 (ages 3, 7, 8, 9, 11, 12, 39, and 49 years); by falling overboard from small boats, 13 (4 under 20 years); by capsized canoes, 3 (ages 16, 22, and 42 years); by overturned skiff, 2 (age of each, 17 years); by swamping or overturning of sailboats, 6 (1 child and 5 adults); from mud-scow, barge, or steamer, 3 (ages 22, 29, 48 years); from shore or wharf, 9 (6 children and 3 adults); from trestle into water while intoxicated, 1; by falling into tub of water in yard, 1 (age 3 years); in vessel at birth, 1; found in water, circumstances of drowning unknown, 18. Total, 72.

Electric Car.—Of the persons who were killed by electric cars 5 were walking on or beside tracks in dark places, or in an intoxicated

condition; 1, a conductor, in leaning too far from car, was struck on head by post; 1, an old lady, was struck by car while crossing street; 1, a passenger, jumped from car while it was in motion, striking on head; and 4 children, who ran in front of, or against, car while at play. Total, 12.

Electrical Shock.—In contact with live wire while at work as lineman, 3; while turning current on incandescent light in stable, 1. Total, 4.

Elevator.—Crushed by being caught between elevator and floor, (elevator-boy); fireman caught and suffocated between elevator and ceiling, circumstances unknown. Total, 2.

Exposure to Cold and Storm.—5 (ages 40, 48, 65, 67, and 80 years).

Falls.—Down stairs or steps, 20 (of these 9 were over 60 years of age); from building or staging, 11 (adults); from windows, 3 (children); from tree, 1 (adult); down hatch on battleship, 1; into hold of vessel, 1; into coal-pocket, 1; from masthead while at sea, 1; from fence, 2 (ages 3 and 22 years); out of bed, 1 (age 71 years); from cradle, 1 (infant); on ice, 1 (age 75 years); upon a barbed wire, 1 (adult); on floor, ground, or sidewalk, 34 (22 of these were over 60 years of age). Total, 79.

Firearms.—By accidental discharge of gun, shot entering mouth, 1 (age 16 years); shot by companion who was taking cartridge from rifle, 1 (age 3 years); revolver, accidentally discharged while handling it, 1 (adult); gunshot wound of hand, tetanus following, 1 (age 15); blank cartridge wound of hand, tetanus resulting, 1 (age 10 years); these last two cases were 4th July accidents. Total, 5.

Heat.—7 (4 children and 3 adults).

Lightning.—1 (age 37 years).

Machinery.—Caught in belting or shafting, 3 (ages 13, 16, and 31 years); crushed between rolls of carding machine, 1 (age 16 years); hit on head by iron clamps on belt, 1 (17 years). Total, 5.

Poison.—Corrosive sublimate, taken by mistake for rheumatism medicine, 1 (age 19 years); overdose of chloral, 1 (age 61); caustic potash, mistaken for epsom salts, 1 (adult); potash taken by child while mother was washing, 1; by drinking fly-poison, 1 (age 2 years); by taking medicine or pills belonging to mother, 3 (children); by wood alcohol, 1 (age 61 years); and 1 by ptomaine poisoning, probably from eating decayed fruit (age 8 years). Total, 10.

Railroad.—Of the employees who were killed 7 fell from moving cars; 1 fell while attempting to board moving train; 3 were coupling cars; 2 were working in coal-pocket; 2 were found beside tracks, and it was supposed were struck by some passing trains; 1 was struck by train while not on duty; 1 in collision of trains; 1 patrolling track on railroad velocipede was struck by train; and 1, a freight conductor, while standing on station platform, was struck by truck which was hurled against him, the truck having been hit by passing freight train. Of the remaining 33 persons classed as trespassers, 22 were walking on the tracks, 7 attempting to cross tracks, and 4 were stealing rides on freight cars. Total, 52.

Accidents, Various.—Thrown from carriage or wagon, 3 (adults); thrown from baby carriage, 1 (infant); run over by heavy teams, 10 (6 of these were children); kicked by horse, 5 (adults); knocked down by wagons on street, 2 (ages 50 and 80 years); fractured skulls by falling chimneys, 3 (adults); struck by piece of timber thrown by wheel of team, 1 (adult); struck by board from buzz-saw, 1 (age 30 years); wound of head by circular saw, 1 (age 29 years); crushed between wagon seat and top of shed, 1 (age 33 years); crushed between tip-cart and fence, 1 (age 6 years); crushed under cord of wood which fell on him, 1 (age 65 years); crushed between steam roller and cart loaded with stones, 1 (age 60 years); struck in side by handle of plough, 1 (age 60 years); struck by stone from blast, 1 (adult); by premature explosion of dynamite, 1 (adult); from kick on head while playing football, 1 (age 17 years); struck by foul ball in game of baseball, 1 (age 25 years); injury to head while working in trench, 1 (age 25 years); pushed through glass in saloon, severed jugular vein, 1 (age 45 years); injury to head in bar-room fight, 1; knocked down in boxing match, concussion of brain, 1; struck by top, cerebral hemorrhage, 1 (age 6 months); by stepping on rusty nail, tetanus resulting, 2 (adults); by splinter of wood in hand, tetanus, 1 (age 19 years); bite of dog on hand, septicemia, 1 (adult); knee cut while chopping wood, neglected wound, septicemia, 1 (adult); needle in arm, septicemia, 1 (age 28 years); slight injury to hand, septicemia, 2 (adults); unknown injury to foot, septicemia, 1 (adult); struck in abdomen by sharp pointed brush caught up and thrown by machinery, 1 (adult); fractured tibia, manner unknown, 1; injuries to chest, manner unknown, 1; concussion of brain, manner unknown, 1.

Comparison of the number of deaths from street-car accidents during the last five years presents the following figures:

	Struck by cars.	Collision of cars.	Otherwise.	Total.
1897.....	4.....	1.....	2.....	7
1898.....	6.....	0.....	1.....	7
1899.....	3.....	1.....	1.....	5
1900.....	8.....	6.....	5.....	19
1901.....	7.....	1.....	3.....	11
1902.....	3.....	0.....	7.....	10
1903.....	10.....	0.....	2.....	12

As a result of inattention on the part of those having the care of children, 3 fell into hot water, the clothing of 2 others caught fire from stove, and 9 children received burns which caused death as the result of playing with bonfires or matches.

It is interesting to note the large number of cases resulting from fractures of the long bones as the sequence of a slight fall. This is especially noticeable in fractures of the hip in old people. Out of the 79 who died from the result of falls, 32 were over 60 years of age; and of these 32, 16 sustained fractures of hip.

Of the whole number of deaths by accidents, 276 were males and 100 were females; 135 were of native and 241 were of foreign parentage, or 35.9 per cent. of native to 64.1 per cent. of foreign.

Of the sexes, the proportion was 73.4 per cent. of male decedents to 26.6 of female decedents.

In regard to the periods of life, the decedents from accidental causes were divided as follows: under 5 years, 58; 5 and under 10, 22; between 10 and 20, 35; between 20 and 40, 115; between 40 and 60, 74; over 60, 70; and not stated, 2.

In regard to sectional divisions of the State, 16 of the deaths from accidental causes were in Bristol county; 27 in Kent county; 24 in Newport county; 285 in Providence county; and 24 in Washington county.

The whole number of deaths from accidental causes, in 1903, *in proportion to the whole number of deaths* in the State, was 43.5 in every one thousand. The number in proportion to the whole *population* was .81 in every one thousand.

The number of deaths by accidents in each division of the year was as follows:

First Quarter.....	90	Third Quarter.....	110
Second Quarter.....	91	Fourth Quarter.....	85
First half.....	181	Second half.....	195
Whole year.....	376		

In the following Table may be found the number, sex, parentage, and locality of mortality from accidents, for thirty-eight years, ending December 31, 1903.

TABLE LXI.

Mortality in the State from Accidents, with the Percentage of the Whole Number of Deaths; Sex, Parentage, and Locality for thirty-eight years, from 1866 to 1903, inclusive, in three periods of five years each, and for each of the last twenty-three years.

YEARS.	VARIETIES.										SEX.		PARENT-AGE.		STATE DIVISIONS.					
	Whole Number.	Burns and Scalds.	Drowning.	Falls.	Fractures and Contusions.	Poisoning.	Railroad.	Suffocation.	Various and Unspecified.	Per cent.	Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870.	490	77	124	89	....	14	43	....	143	2.18	375	115	238	252	22	34	46	187	162	39
5 years, 1871-1875.	610	78	164	90	....	21	71	....	186	2.97	493	117	283	327	26	46	50	200	240	48
5 years, 1876-1880.	607	75	166	69	....	28	58	14	197	2.72	450	157	249	358	17	53	47	178	281	31
1881.....	155	16	29	19	....	9	20	19	43	3.09	107	48	62	93	5	17	12	60	56	5
1882.....	178	17	40	31	....	6	16	8	60	3.50	130	48	72	106	5	9	15	60	80	9
1883.....	153	18	27	21	....	6	16	12	53	2.83	117	36	61	92	4	8	9	63	66	3
1884.....	197	20	41	31	....	7	16	11	71	3.82	147	50	90	107	5	19	14	65	76	18
1885.....	173	19	42	25	....	9	15	9	54	3.20	135	38	72	101	5	6	8	58	83	13
1881-1885.	856	90	179	127	....	37	83	59	281	3.26	636	220	357	499	24	59	58	306	361	48
1886.....	190	23	58	19	....	6	20	9	55	3.25	141	49	84	106	16	11	16	62	72	13
1887.....	206	17	39	17	23	7	24	14	65	3.24	158	48	92	114	5	11	23	81	71	15
1888.....	190	27	46	18	8	12	25	8	46	2.87	145	45	63	127	4	6	14	70	88	8
1889.....	216	20	52	31	25	7	23	9	49	4.10	146	70	88	128	2	14	13	73	101	13
1890.....	250	20	71	32	26	11	31	12	47	3.60	199	51	99	151	7	17	24	75	111	16
1886-1890.	1052	107	266	117	82	43	123	52	262	3.29	789	263	426	626	34	59	90	361	443	65
1891.....	233	18	52	21	29	16	30	17	50	3.54	174	59	78	155	5	18	16	95	89	10
1892.....	309	21	48	33	60	20	29	8	90	4.18	225	84	115	194	8	13	21	100	158	9
1893.....	264	26	47	25	25	14	39	14	74	3.55	195	69	88	176	9	21	21	75	126	12
1894.....	234	28	52	29	20	8	36	21	40	3.27	189	45	74	160	6	24	18	88	81	17
1895.....	293	28	61	57	2	8	36	26	75	3.89	233	60	88	205	6	23	13	85	141	25
1891-1895.	1333	121	260	165	136	66	170	86	329	3.69	1016	317	443	890	34	99	89	443	595	73
1896.....	296	25	39	48	....	8	36	24	116	3.94	226	70	101	195	6	25	24	85	139	17
1897.....	263	41	40	64	....	7	24	22	65	3.70	197	66	94	169	12	15	22	87	115	12
1898.....	266	21	60	58	....	8	30	19	100	4.29	233	63	111	185	11	18	26	85	134	22
1899.....	276	28	45	61	....	7	38	31	66	3.70	217	59	109	167	9	16	30	82	125	14
1900.....	336	33	64	72	....	16	26	29	96	3.81	254	82	110	226	15	30	12	101	159	19
1896-1900.	1467	148	248	303	....	46	154	125	443	3.88	1127	340	525	942	53	104	114	440	672	84
1901.....	346	36	57	60	18	6	33	33	103	4.34	267	79	123	223	12	21	18	102	175	18
1902.....	317	34	47	74	15	9	45	27	66	3.98	244	73	121	196	8	14	26	93	161	15
1903.....	376	34	72	79	17	10	52	31	81	4.35	276	100	135	241	16	27	24	114	171	24
Total, 38 years.	7451	800	1583	1173	268	280	832	427	2091	3.47	5673	1781	2900	4554	246	516	562	2424	3261	445

* Exclusive of Providence city.

TABLE LXII.

Mortality in the State from Alcoholism, with the Percentage of the Whole Number of Deaths, Sex, Parentage, and Locality, for thirty-eight years, from 1866 to 1903, inclusive.

YEARS.	Number of Deaths from Alcoholism.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	62	.40	53	9	32	30	5	6	6	18	25	2
5 years, 1871-1875	93	.45	73	20	37	56	2	6	9	25	48	3
5 years, 1876-1880	79	.35	52	27	25	54	2	4	6	18	45	4
1881.....	24	.51	17	7	5	19	1	.....	1	7	14	1
1882.....	28	.58	16	12	8	20	.....	.....	.....	9	18	1
1883.....	29	.54	17	12	7	22	.....	1	1	10	16	1
1884.....	27	.53	19	8	10	17	.....	1	4	9	12	1
1885.....	22	.41	16	6	6	16	2	1	.....	11	7	1
1881-1885.....	130	.50	85	45	36	94	3	3	6	46	67	5
1886.....	12	.20	9	3	2	10	1	.....	1	3	7	...
1887.....	16	.25	14	2	4	12	2	2	2	5	4	1
1888.....	16	.32	10	6	5	11	.....	.....	2	5	9	...
1889.....	31	.50	23	8	12	19	2	1	1	13	14	...
1890.....	25	.37	20	5	8	17	2	.....	.....	11	11	1
1886-1890.....	100	.31	76	24	31	69	7	3	6	37	45	2
1891.....	29	.47	22	7	8	21	1	1	4	10	13	...
1892.....	36	.48	27	9	8	28	1	.....	4	12	17	2
1893.....	44	.59	34	10	15	29	.....	3	7	9	23	2
1894.....	39	.54	33	6	12	27	1	4	2	14	16	2
1895.....	24	.32	19	5	5	19	.....	.....	.....	10	13	1
1891-1895.....	172	.48	135	37	48	124	3	8	17	55	82	7
1896.....	34	.45	28	6	7	27	1	2	6	10	14	1
1897.....	36	.51	26	10	10	26	.....	1	5	11	15	4
1898.....	45	.65	37	8	13	32	.....	3	3	13	22	4
1899.....	34	.45	26	8	9	25	1	3	4	9	16	1
1900.....	62	.70	47	15	12	50	1	2	3	12	42	2
1896-1900.....	211	.56	164	47	51	160	3	11	21	55	109	12
1901.....	40	.50	35	5	13	27	2	2	3	15	17	1
1902.....	39	.49	36	3	10	29	.....	2	3	15	18	1
1903.....	50	.58	42	8	15	35	.....	3	4	8	32	3
Total, 38 years...	976	.45	751	225	298	678	27	48	81	292	488	40

* Exclusive of Providence city

APOPLEXY.

There were 394 deaths from apoplexy, including cerebral hemorrhage, in Rhode Island, in 1903, according to the returns. The number reported is 82 less than in the year 1902.

The whole number of deaths from apoplexy represents 4.56 per cent. of *all causes*, and a proportion of 0.85 to every one thousand of the population.

Of the sexes, there were 169 males and 225 females.

Of parentage, 204 were of native parentage, and 190 of foreign.

As observed in previous reports, the older native population has steadily been, in a very large proportion, more prone to apoplexy than the foreign, or the children of the foreign, population.

The following Table will present the sex, parental, and local relations of apoplexy, including cerebral hemorrhage, as cause of death, during the last thirty-eight years (Providence city not included in the Providence county statement):

TABLE LXIII.

Mortality in the State from Apoplexy, 1866 to 1903, inclusive.

YEARS.	Total Deaths for Year.	Number from Apoplexy.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
				Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	15,391	574	3.73	284	290	464	110	52	43	77	145	224	33
1871.....	3,344	156	4.66	73	83	113	43	10	17	15	40	61	13
1872.....	4,247	125	2.97	62	63	96	29	17	9	10	27	52	10
1873.....	4,403	134	3.04	59	75	109	25	9	8	17	26	57	17
1874.....	4,229	156	3.69	84	72	120	36	14	10	16	42	59	15
1875.....	4,317	166	3.61	79	87	133	33	7	13	17	46	75	8
1871-1875.....	20,540	737	3.59	357	380	571	166	57	57	75	181	304	63
1876.....	4,116	165	4.01	79	86	130	35	13	11	13	45	68	15
1877.....	4,150	181	4.07	87	94	123	58	10	10	16	52	74	19
1878.....	4,441	188	4.23	104	84	145	43	12	16	21	58	66	15
1879.....	4,472	220	4.92	114	106	146	74	12	9	29	71	89	10
1880.....	4,829	215	4.67	109	106	157	58	18	13	22	71	78	13
1876-1880.....	22,308	969	4.77	493	476	701	268	65	59	101	297	375	72
1881.....	5,016	244	4.86	116	128	170	74	17	15	25	70	101	16
1882.....	5,074	265	5.22	139	126	168	97	15	29	24	65	117	15
1883.....	5,282	275	5.22	138	137	192	83	11	28	22	75	118	21
1884.....	5,141	298	5.80	135	163	176	122	21	14	28	108	105	22
1885.....	5,389	289	5.38	144	145	183	106	16	18	28	99	110	18
1881-1885.....	25,902	1,371	5.29	672	699	889	482	80	104	127	417	651	92
1886.....	5,849	333	5.70	173	160	230	103	11	27	32	108	120	35
1887.....	6,340	328	5.17	161	167	213	115	21	27	23	101	128	28
1888.....	6,594	367	5.11	164	203	234	133	29	26	29	113	137	33
1889.....	6,259	323	5.17	140	183	205	119	23	32	28	101	106	33
1890.....	6,934	341	4.91	168	173	206	135	21	21	23	110	144	22
1886-1890.....	31,976	1,692	5.29	806	886	1,087	605	105	133	135	533	635	151
1891.....	6,620	335	5.08	160	175	207	128	17	29	32	118	118	21
1892.....	7,396	362	4.29	176	186	195	167	12	29	39	124	134	24
1893.....	7,440	407	5.47	206	201	227	180	21	28	26	138	171	23
1894.....	7,160	445	6.22	231	214	243	202	19	33	40	155	165	33
1895.....	7,535	417	5.53	199	218	238	179	18	29	30	150	153	37
1891-1895.....	36,151	1,966	5.71	972	994	1,110	856	87	148	167	685	741	138
1896.....	7,504	419	5.58	199	220	235	184	20	30	42	146	141	40
1897.....	7,110	469	6.70	229	240	263	206	13	33	40	175	184	24
1898.....	6,905	416	6.02	203	213	245	171	17	30	48	136	152	33
1899.....	7,458	457	6.13	210	247	230	227	19	32	36	154	179	37
1900.....	8,823	506	5.74	248	258	275	231	18	38	49	175	189	37
1896-1900.....	37,800	2,267	6.00	1,089	1,178	1,248	1,019	87	163	215	786	845	171
1901.....	7,966	499	6.27	223	276	253	246	26	45	51	155	181	41
1902.....	7,955	476	5.98	212	264	244	232	17	37	45	175	176	26
1903.....	8,642	394	4.56	169	225	204	190	22	33	42	132	143	22

* Not including Providence city.

APPENDICITIS.

From a greater perfection in diagnosis of disease of the abdominal viscera, the disease known as appendicitis has received greater attention. This was probably reported in previous years under the head of diseases of the bowels, intussusception, or peritonitis.

During 1903, there were 63 deaths from appendicitis reported, and of this number operations were performed in 48 cases.

As there were 23 deaths from peritonitis in 1903, this would represent over seventy-three per cent. of the combined numbers.

Of the 63 cases of appendicitis, 34 were males and 29 were females; 30 were of native and 33 of foreign parentage.

BRAIN DISEASES.

The number of decedents from diseases of the brain proper, in 1903, was 204.

This number represents 2.36 per cent. of *all causes*, and a proportion of .44 to every one thousand of the whole *population*.

Of the 204 decedents, 103 were males and 101 were females.

In regard to parentage, 74 were of native and 130 of foreign parentage.

The deaths in the different seasons of the year were as follows:

First Quarter.....	51	Third Quarter.....	63
Second Quarter.....	48	Fourth Quarter.....	42
<hr/>		<hr/>	
First half.....	99	Second half.....	105
<hr/>			
Whole year.....		204	

Brain diseases occur largely in children. Of the 204 decedents from those causes, in 1903, 100 were under five years of age.

The following Table will present the statistics of mortality from diseases of the brain, for thirty-eight years:

TABLE LXV.

Mortality in the State from Brain Diseases, with the Percentage, Sex, Parentage, and Locality, for thirty-eight years, from 1866 to 1903, inclusive.

YEARS.	Number of Deaths from Brain Diseases.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	465	3.02	249	216	274	191	21	24	34	139	222	25
1871-1875.....	607	2.95	331	276	358	249	12	32	39	167	337	20
1876.....	150	3.64	92	58	89	61	3	11	7	39	85	5
1877.....	160	3.59	88	72	91	69	3	7	11	49	85	5
1878.....	142	3.19	75	67	76	66	1	13	12	45	68	3
1879.....	163	3.65	82	81	88	75	3	13	15	51	75	6
1880.....	164	3.39	87	77	89	75	3	6	12	56	81	6
1876-1880.....	779	3.49	424	355	433	346	13	50	57	240	394	25
1880.....	186	3.69	103	83	85	101	7	11	14	58	91	5
1882.....	181	3.50	93	88	92	89	4	10	10	71	80	6
1883.....	187	3.54	96	91	100	87	8	14	15	52	94	4
1884.....	148	2.88	90	58	77	71	4	9	8	41	83	3
1885.....	189	2.51	98	91	94	95	2	11	20	53	100	3
1881-1885.....	891	3.44	480	411	448	443	25	55	67	275	448	21
1886.....	182	3.09	108	74	84	98	4	14	13	69	78	4
1887.....	203	3.21	120	83	103	100	8	9	14	75	95	2
1888.....	212	3.21	114	98	109	103	4	19	12	76	90	11
1889.....	189	3.58	91	98	96	93	5	12	17	72	78	5
1890.....	217	3.13	113	104	119	98	7	13	17	90	85	5
1886-1890.....	1,003	3.14	546	457	511	492	28	67	73	382	426	27
1891.....	222	3.36	135	87	108	114	8	19	19	93	78	5
1892.....	246	3.33	130	116	122	124	8	22	27	96	83	10
1893.....	257	3.46	139	118	116	141	12	17	23	100	98	7
1894.....	221	3.09	122	99	93	128	4	24	13	82	84	14
1895.....	258	3.42	123	135	126	132	14	25	22	81	105	11
1891-1895.....	1,204	3.33	649	555	565	639	46	107	104	452	448	47
1896.....	299	3.98	152	147	136	163	10	24	38	139	79	9
1897.....	328	4.61	179	149	151	177	7	26	30	178	78	9
1898.....	327	4.73	176	151	131	196	5	26	26	157	100	13
1899.....	267	3.58	143	124	117	150	8	16	20	143	77	3
1900.....	290	3.29	161	129	126	164	3	26	34	151	69	7
1896-1900.....	1,511	4.00	811	700	661	850	33	118	148	768	403	41
1901.....	281	3.52	143	138	103	178	7	25	29	127	90	3
1902.....	268	3.37	134	134	109	159	6	26	25	126	80	5
1903.....	204	2.36	103	101	74	130	2	14	15	112	56	5
Total, 38 years...	7,213	3.36	3,870	3,343	3,536	3,677	193	518	391	2,788	2,904	219

* Exclusive of Providence city.

BRONCHITIS.

The number of decedents, in 1903, whose deaths were reported as having been caused by bronchitis, was 265. This is 6 more than in 1902.

This number represents 3.07 per cent. of *all causes*, and a proportion of .57 to every one thousand of the *population*.

Of the 265 decedents, 128 were males and 137 were females; or at the rate of 93 males to each 100 females.

In relation to parentage, 79 were of native and 186 of foreign parentage.

In regard to age, 166 of the decedents were under 5 years of age, 6 were between 5 and 20 years, 6 between 20 and 40 years, 30 between 40 and 60 years; and of the remaining 57 decedents, above 60 years of age, there were 29 deaths from chronic bronchitis.

During the first four months of the year the decedents from bronchitis numbered 117, during the last four months the number was 51.

The very large increase in the proportionate mortality from bronchitis, during the last twenty years, will scarcely fail to be noticed in Table LXVI.

The following Table will show various facts in relation to the mortality from bronchitis, for thirty-eight years:

TABLE LXVI.

Mortality in the State from Bronchitis, thirty-eight years, 1866 to 1903, inclusive.

YEARS.	Number of Deaths. Per cent.		SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	99	.64	43	56	47	52	1	4	7	29	56	2
1871.....	24	.78	10	14	11	13	.....	1	1	5	17	.....
1872.....	25	.65	10	15	11	14	1	1	1	6	16	.....
1873.....	27	.64	12	15	11	16	.....	.....	1	7	18	1
1874.....	39	.96	22	17	12	27	.....	.....	.....	6	32	1
1875.....	57	1.39	32	25	29	28	.....	.....	1	21	33	2
1871-1875.....	172	.84	86	86	74	98	1	2	4	45	116	4
1876.....	57	1.46	23	34	26	31	.....	2	.....	7	46	2
1877.....	69	1.62	32	37	35	34	1	1	1	22	44	.....
1878.....	80	1.89	30	50	37	43	1	2	6	22	48	1
1879.....	62	1.47	31	31	31	31	1	1	5	21	34	.....
1880.....	91	1.86	49	42	44	47	1	6	6	21	56	1
1876-1880.....	359	1.61	165	194	173	186	4	12	18	93	228	4
1881.....	84	.67	48	36	39	45	1	1	2	25	53	2
1882.....	100	1.27	39	61	47	53	3	2	6	25	60	4
1883.....	111	2.10	56	55	51	60	5	2	3	42	57	2
1884.....	118	2.29	58	60	40	78	6	.....	8	42	62	.....
1885.....	168	3.08	82	86	91	77	5	3	13	71	76	.....
1881-1885.....	581	2.24	283	298	268	313	20	8	32	205	308	8
1886.....	174	2.96	75	99	81	93	3	4	9	74	83	1
1887.....	176	2.77	90	86	60	116	3	6	19	63	84	1
1888.....	228	3.45	105	123	79	149	3	4	17	110	88	6
1889.....	260	4.20	128	132	90	170	4	8	18	109	110	11
1890.....	275	4.01	140	135	116	159	5	4	15	107	138	6
1886-1890.....	1,113	3.48	538	575	426	687	18	26	78	463	503	25
1891.....	247	3.74	108	139	95	152	13	15	21	85	111	2
1892.....	308	4.16	147	161	117	191	5	15	21	130	130	7
1893.....	315	4.24	164	151	105	210	4	9	21	150	126	5
1894.....	254	3.55	112	142	82	172	4	15	11	98	120	6
1895.....	274	3.64	133	141	92	182	8	15	19	103	122	7
1891-1895.....	1,398	3.87	664	734	491	907	34	69	93	566	609	27
1896.....	276	3.68	143	133	101	175	8	19	9	112	116	12
1897.....	226	3.18	123	103	83	143	6	19	13	88	94	6
1898.....	236	3.42	109	127	76	160	6	14	11	87	103	15
1899.....	241	3.23	118	123	73	168	7	16	10	96	103	9
1900.....	295	3.34	143	152	116	179	6	30	22	101	127	9
1896-1900.....	1,274	3.37	636	638	449	825	33	98	65	484	543	51
1901.....	232	2.91	111	121	88	144	.....	16	7	94	100	15
1902.....	259	3.26	117	142	86	173	7	17	6	105	113	11
1903.....	265	3.07	128	137	79	186	3	15	7	108	127	5
Total, 38 years...	5,752	2.68	2,771	2,981	2,181	3,571	121	267	317	2,192	2,703	152

* Exclusive of Providence city.

CANCER.

There were 350 decedents, in 1903, whose deaths were caused by cancer, according to the returns. The term cancer includes all the various kinds, and in whatever place located.

This number represents 4.05 per cent. of *all causes*, and a proportion of .75 to every one thousand of the *population*.

The varieties of cancer, as reported, may be found in Tables VII and VIII, on pages 22, 23, 37, 38, and 39. They are classed in Table IX as follows: cancer of the buccal cavity, 13; cancer of the stomach and liver, 134; cancer of the peritoneum, intestines, and rectum, 37; cancer of the female genital organs, 59; cancer of the breast, 45; cancer of the skin, 13; cancer of other organs and organs not specified, 49.

In 1903, the deaths from cancer, in the several divisions of the year, were as follows:

First Quarter.....	81	Third Quarter.....	90
Second Quarter.....	89	Fourth Quarter.....	90
<hr/>		<hr/>	
First half.....	170	Second half.....	180
<hr/>			
Whole year.....		350	

Sex.—Of the 350 decedents from cancer, 121 were males and 229 were females; or 48 males and 52 females in every 100.

Parentage.—There were 153 of native parentage and 197 of foreign.

The following Table will show the facts of mortality from cancer, in relation to sex, parentage, and locality, for thirty-eight years:

TABLE LXVII.

Mortality in the State from Cancer, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	328	2.13	98	230	269	59	19	33	38	87	131	20
1871.....	66	2.13	25	41	47	19	.....	7	5	25	25	4
1872.....	95	2.46	26	69	66	29	4	7	9	21	50	4
1873.....	106	2.53	45	61	76	30	4	6	12	32	44	8
1874.....	87	2.13	23	64	67	20	4	6	12	24	38	3
1875.....	95	2.31	24	71	62	33	3	6	7	25	49	5
1871-1875.....	449	2.18	143	306	318	131	15	32	45	127	206	24
1876.....	106	2.72	27	79	72	34	5	6	8	27	53	7
1877.....	135	3.17	29	106	87	48	3	7	9	37	66	13
1878.....	119	2.82	38	81	79	40	5	11	8	37	48	10
1879.....	125	2.96	39	86	70	55	9	6	9	28	66	7
1880.....	125	2.72	45	80	73	52	5	10	12	26	68	4
1876-1880.....	610	2.73	178	432	381	229	27	40	46	155	301	41
1881.....	145	2.90	40	105	90	55	8	10	12	42	65	8
1882.....	132	2.75	40	92	82	50	5	15	9	43	52	8
1883.....	169	3.20	51	118	105	64	3	17	12	49	86	2
1884.....	156	3.05	39	117	88	68	2	18	21	41	70	4
1885.....	193	3.59	52	141	114	79	8	9	8	67	88	13
1881-1885.....	795	3.07	222	573	479	316	26	69	62	242	361	35
1886.....	162	2.77	42	120	75	87	6	11	9	37	87	12
1887.....	159	2.50	49	110	96	63	8	5	10	49	80	7
1888.....	193	2.93	67	126	128	65	9	10	12	57	88	17
1889.....	189	3.03	65	124	104	85	4	10	13	57	82	23
1890.....	165	2.41	56	109	92	73	14	10	13	46	74	8
1886-1890.....	868	2.71	279	589	495	373	41	46	57	246	411	67
1891.....	177	2.67	48	129	104	73	8	11	15	46	83	14
1892.....	181	2.45	53	128	103	78	7	16	16	57	75	10
1893.....	205	2.75	54	151	124	81	6	15	17	56	92	19
1894.....	214	2.99	67	147	121	93	13	11	23	75	73	19
1895.....	234	3.11	74	160	106	128	13	12	17	79	96	17
1891-1895.....	1,011	2.79	296	715	558	453	47	65	88	313	419	79
1896.....	226	3.01	61	165	117	109	6	21	12	81	89	17
1897.....	254	3.57	77	177	128	126	12	14	22	86	103	17
1898.....	279	4.04	83	196	159	120	18	18	24	75	119	25
1899.....	292	3.92	95	197	135	157	11	16	29	83	132	21
1900.....	292	3.31	96	196	144	148	18	19	15	87	132	21
1896-1900.....	1,343	3.55	412	931	683	660	65	88	102	412	575	101
1901.....	306	3.84	97	209	145	161	6	13	35	90	142	20
1902.....	341	4.29	124	217	179	162	12	19	27	109	147	27
1903.....	350	4.05	121	229	153	197	11	21	24	109	154	31
Total, 38 years...	6,401	2.98	1,970	4,431	3,660	2,741	269	426	524	1,890	2,847	445

* Exclusive of Providence city

CHILD-BIRTH.

Under the head of "Child-birth" are included, in this connection, whatever causes of death that may have occurred as the direct result of child-birth, or parturition.

The number reported in 1903 was 60, and the causes given were as follows:

Puerperal Septicemia.....	25
" Nephritis and Eclampsia.....	8
" Peritonitis.....	4
" Embolism.....	1
Post-partum Hemorrhage.....	6
Placenta Previa.....	1
Rupture of Uterus.....	2
Difficult and Prolonged Labor.....	5
Extra-Uterine Pregnancy.....	3
Persistent vomiting of Pregnancy.....	4
Abortion, self-inflicted.....	1

Of the whole number, 16 were of native and 44 of foreign parentage.

This number represents .70 per cent. of *all causes*, and a proportion of .13 to every one thousand of the *population*.

There were 21 less deaths from "child-birth" in 1903 than in 1902.

The following Table will present the various relations in regard to the mortality from child-birth, for thirty-eight years, 1866-1903:

TABLE LXVIII.

Mortality in the State from Child-birth, with the Percentage of the Whole Number of Deaths, Parentage, and Locality, for thirty-eight years, from 1866 to 1903, inclusive.

YEARS.	Number of Deaths from Child-birth.	Per cent.	PARENTAGE.		DIVISIONS OF THE STATE.					
			Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	155	1.01	62	93	7	6	16	59	56	11
1871-1875.....	245	1.19	111	134	7	21	12	76	110	10
1876.....	48	1.24	21	27	3	.....	1	18	23	3
1877.....	46	1.09	18	28	4	3	5	17	17	.....
1878.....	43	1.01	23	20	2	4	3	9	21	4
1879.....	43	1.02	21	22	1	7	2	6	23	4
1880.....	51	1.11	23	28	4	4	3	10	27	3
1876-1880.....	231	1.04	106	125	14	18	14	60	111	14
1881.....	60	1.28	26	34	1	1	3	22	29	4
1882.....	50	1.03	18	32	.....	5	1	16	27	1
1883.....	58	1.10	26	32	1	5	9	14	27	2
1884.....	47	.91	17	30	.....	3	3	19	18	4
1885.....	47	.87	21	26	.....	3	4	15	24	1
1881-1885.....	262	1.04	108	154	2	17	20	86	125	12
1886.....	41	.70	17	24	.....	4	4	15	17	1
1887.....	53	.71	15	38	.....	5	4	18	26	.....
1888.....	51	.77	13	38	.....	3	.....	25	20	3
1889.....	41	.65	14	27	1	5	2	16	13	4
1890.....	41	.58	12	29	3	4	4	10	17	3
1886-1890.....	274	.86	92	182	4	24	18	99	117	12
1891.....	32	.35	8	24	.....	3	.....	8	19	2
1892.....	75	1.01	29	46	1	9	3	24	29	9
1893.....	57	.76	23	34	.....	5	4	15	29	4
1894.....	72	1.01	15	57	.....	8	3	25	32	4
1895.....	55	.73	16	39	.....	3	.....	18	30	4
1891-1895.....	291	.77	91	200	1	28	10	90	139	23
1896.....	50	.67	16	34	.....	2	1	24	17	6
1897.....	57	.80	18	39	2	8	.....	21	22	4
1898.....	71	1.03	22	49	1	6	1	28	32	3
1899.....	55	.74	11	44	1	7	3	15	27	2
1900.....	99	1.12	27	72	2	11	4	31	47	4
1896-1900.....	332	.88	94	238	6	34	9	119	145	19
1901.....	95	1.19	38	57	.....	8	6	36	42	3
1902.....	72	.91	15	57	1	6	7	25	32	1
1903.....	60	.70	16	44	1	5	5	14	31	4
Total, 38 years.....	2,017	.94	733	1,284	43	167	117	664	908	118

* Exclusive of Providence city.

CHOLERA INFANTUM.

The number of deaths from cholera infantum, or diarrhea and enteritis, under 2 years, according to the returns for 1903, was 638.

This number represents 7.38 per cent. of deaths from *all causes*, and a proportion of 1.38 to every one thousand of the *population*.

Of the 638 decedents, 355 were males and 283 were females.

Of parentage, 209 were of native and 429 of foreign parentage; or about 205 of foreign to every 100 of native parentage.

As may be seen on the following page, the number of decedents from cholera infantum, during the thirty-eight years from 1866 to 1903, inclusive, was 13,745.

The proportion to total mortality for the period of thirty-eight years was 6.4 per cent.

There were 125 males to every 100 females among the decedents during the thirty-eight years; and 210 decedents of foreign parentage to every 100 of native, during the same period.

The following Table shows the whole number of reported deaths from cholera infantum; the sex and parentage of the decedents; and the number in each of the larger divisions of the State, in each of the last thirty-eight years:

TABLE LXIX.

Mortality in the State from Cholera Infantum, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	745	4.84	403	342	352	393	39	44	46	245	324	47
1871.....	172	4.82	85	87	82	90	14	12	12	59	62	13
1872.....	391	8.71	195	196	167	224	16	16	21	157	151	30
1873.....	285	6.19	148	137	165	120	17	14	16	120	99	19
1874.....	265	5.86	140	125	115	150	4	12	5	84	134	26
1875.....	318	6.97	156	162	155	163	20	16	20	108	136	18
1871-1875.....	1,431	6.97	724	707	684	747	71	70	74	528	582	106
1876.....	250	5.75	131	119	105	145	5	12	29	68	124	12
1877.....	259	5.52	139	120	96	163	12	13	9	96	122	7
1878.....	168	3.58	96	72	73	95	7	14	7	64	71	5
1879.....	161	3.43	88	73	71	90	8	16	21	51	59	6
1880.....	247	5.12	123	124	109	138	13	11	10	93	100	20
1876-1880.....	1,085	4.86	577	508	454	631	45	66	76	372	476	50
1881.....	240	4.54	130	110	102	138	10	22	14	75	102	17
1882.....	325	6.10	173	152	133	192	20	11	19	132	130	13
1883.....	242	4.37	124	118	104	138	12	7	22	88	108	5
1884.....	325	6.00	177	148	139	186	10	12	26	114	144	19
1885.....	279	4.92	150	129	128	151	5	23	16	133	86	16
1881-1885.....	1,411	5.45	754	657	606	805	57	75	97	542	570	70
1886.....	377	6.14	179	198	143	234	4	29	15	194	120	15
1887.....	355	5.36	200	155	145	210	16	16	35	160	119	9
1888.....	467	6.78	239	228	184	283	18	35	28	219	149	18
1889.....	396	6.01	209	187	132	264	18	32	20	199	116	11
1890.....	582	8.01	282	300	202	380	19	57	33	245	209	19
1886-1890.....	2,177	6.81	1,109	1,068	806	1,371	75	169	131	1,017	713	72
1891.....	546	8.25	298	248	170	376	21	68	50	255	137	16
1892.....	633	8.56	336	297	210	423	18	77	43	281	201	13
1893.....	603	8.10	324	279	186	417	11	82	44	267	183	16
1894.....	496	6.93	243	253	162	334	13	76	25	225	130	27
1895.....	500	6.64	268	232	155	345	14	57	19	241	150	19
1891-1895.....	2,778	7.55	1,469	1,309	883	1,895	77	360	181	1,209	801	90
1896.....	545	7.26	313	232	165	380	5	62	38	277	148	15
1897.....	425	5.98	204	221	160	265	12	63	30	179	120	21
1898.....	468	6.78	240	228	163	305	14	62	28	211	144	9
1899.....	473	6.34	265	208	127	346	32	48	23	220	139	11
1900.....	557	6.54	311	246	207	350	19	60	47	281	125	25
1896-1900.....	2,468	6.53	1,333	1,135	822	1,646	82	295	166	1,168	676	81
1901.....	401	5.03	215	186	132	269	6	38	20	187	146	4
1902.....	611	7.68	333	278	199	412	24	67	50	230	236	4
1903.....	638	7.38	355	283	209	429	29	53	24	244	273	15
Total, 38 years...	13,745	6.40	7,272	6,473	5,147	8,598	505	1,237	865	5,802	4,797	539

* Exclusive of Providence city.

TUBERCULOUS DISEASES.* (CONSUMPTION.)

The decedents from tuberculous diseases (consumption), during 1903, numbered 1,021. The number is 87 in excess of the preceding year.

This number represents 11.81 per cent. of *all causes*, and a proportion of 2.19 to every one thousand of the *population*.

Of these, 840 deaths were from pulmonary tuberculosis and 181 from other tuberculous diseases.

Sex.—Of these 1,021 decedents, 543 were males and 478 were females; being about 88 female decedents to every 100 male decedents.

For the period of thirty years (1866–1895) there were 117 females to every 100 male decedents from tuberculous diseases (consumption), but for the five years 1896–1900 there were but 98 females to every 100 male decedents.

Parentage.—There were 319 decedents of native parentage and 702 of foreign; a proportion of 220 of foreign parentage to every 100 of native.

Season.—The largest number of deaths, 96, occurred in May; the next largest, 94, in April; the smallest, 72, in June.

The number in each quarter of the year was as follows:

First Quarter.....	264	Third Quarter.....	261
Second Quarter.....	262	Fourth Quarter.....	234
<hr/>		<hr/>	
First half.....	526	Second half.....	495
<hr/>			
Whole year.....		1,021	

Ages.—During 1903, of the 1,021 decedents from tuberculous diseases, 255, or one-quarter, were between the ages of 20 and 30; and 224, or more than one-fifth, were between the ages of 30 and 40.

In order to show more concisely the relation of age to mortality from consumption, during 1903, the following age periods and numbers are presented:

*Include deaths from pulmonary tuberculosis, general tuberculosis, tuberculosis of hip-joint, kidney, knee-joint and shoulder, tuberculous enteritis, tuberculous laryngitis, tuberculous meningitis, tuberculous peritonitis.

Under 10 years of age.....	163
Between 10 and 20 years.....	81
Between 20 and 30 years.....	254
Between 30 and 40 years.....	224
Between 40 and 50 years.....	137
Between 50 and 70 years.....	140
Over 70 years.....	22
Not stated.....	
Total.....	1,021

The following Table shows the total deaths from all reported *known causes*, with the *number* and *parentage* of deaths from consumption of the same, in each of the large division of the State, and in the whole State, *in each of the last eighteen years*, and also the aggregate for a period of forty years, from 1861 to 1900, inclusive:

TUBERCULOUS DISEASES.

(CONSUMPTION.)

STATISTICS BY COUNTIES.

NUMBER AND PERCENTAGE.

FORTY-ONE YEARS.

TABLE LXX.—TUBERCULOUS DISEASES (CONSUMPTION).—*Number, Locality, and Percentage.*

Locality.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Total 40 years, 1861-1900.
BRISTOL COUNTY.																				
Total deaths, stated causes.....	185	221	217	251	208	253	239	232	237	200	256	220	230	212	249	296	239	249	276	7,578
Consumption.....	12	23	20	28	20	31	17	29	18	10	29	27	13	29	24	30	25	27	27	872
Percentage.....	6.48	10.35	9.22	11.15	9.62	11.85	7.11	12.50	7.93	5.00	11.33	12.27	5.65	13.68	9.64	10.14	10.46	10.84	9.78	11.51
KENT COUNTY.																				
Total deaths, stated causes.....	355	385	343	408	454	470	500	598	572	574	521	578	535	513	572	706	598	545	570	13,820
Consumption.....	45	43	34	55	45	38	47	51	55	46	54	59	55	54	70	46	55	43	45	1,837
Percentage.....	12.70	11.20	9.91	13.44	9.84	8.08	9.40	8.53	9.62	8.01	10.36	10.21	10.28	10.53	12.24	6.52	9.20	7.89	7.89	13.29
NEWPORT COUNTY.																				
Total deaths, stated causes.....	408	433	435	458	440	470	597	590	506	516	487	532	507	491	561	608	544	602	529	15,438
Consumption.....	47	57	41	32	37	51	51	45	35	46	59	66	55	60	50	52	55	55	55	1,819
Percentage.....	11.52	13.16	9.19	7.00	8.41	10.85	8.51	7.63	6.92	8.91	12.11	12.41	10.85	12.32	8.91	8.55	10.11	9.14	10.40	8.49
PROVIDENCE COUNTY.*																				
Total deaths, stated causes.....	1,918	2,087	2,345	2,465	2,286	2,374	2,344	2,632	2,634	2,536	2,796	2,826	2,646	2,381	2,543	3,080	2,726	2,836	2,947	65,664
Consumption.....	273	276	246	273	257	305	236	265	259	242	271	292	283	307	337	333	337	325	365	8,949
Percentage.....	14.20	13.05	10.49	11.07	11.24	12.84	10.00	10.07	9.83	9.54	9.33	10.33	10.70	12.89	13.25	10.81	12.36	11.46	12.39	13.63

TABLE LXX.—TUBERCULOUS DISEASES (CONSUMPTION).—*Number, Locality, and Percentage.*—Concluded.

LOCALITY.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Total 40 years, 1861-1900.
PROVIDENCE CITY.																				
Total deaths, stated causes.....	2,157	2,341	2,630	2,644	2,495	2,859	2,615	2,950	3,127	2,878	3,055	2,938	2,796	2,921	3,153	3,665	3,425	3,353	3,866	81,560
Consumption.....	348	368	323	362	315	394	347	342	328	325	394	367	341	405	452	486	474	461	502	11,877
Percentage.....	16.10	15.65	12.23	13.66	12.55	12.69	13.19	11.59	10.49	11.29	12.90	12.49	12.20	13.86	14.34	13.26	13.84	13.75	12.96	14.56
WASHINGTON COUNTY.																				
Total deaths, stated causes.....	307	331	351	368	337	316	307	366	306	401	368	381	371	367	358	435	392	311	408	11,065
Consumption.....	56	59	46	50	53	33	27	42	27	36	32	35	30	31	39	40	44	23	27	1,635
Percentage.....	17.93	17.52	13.10	13.58	15.68	10.38	13.61	7.38	8.82	8.98	8.70	9.19	8.09	8.45	10.90	9.20	11.22	7.40	6.62	14.78
WHOLE STATE.																				
Total deaths, stated causes.....	5,330	5,798	6,321	6,594	6,220	6,891	6,586	7,368	7,372	7,105	7,483	7,475	7,085	6,885	7,436	8,790	7,924	7,896	8,596	195,125
Consumption.....	781	826	710	800	727	852	740	759	722	705	839	846	777	886	972	987	990	934	1,021	26,989
Percentage.....	14.42	14.12	11.19	12.13	11.61	12.29	11.18	10.30	9.79	9.92	11.21	11.32	10.97	12.87	13.07	11.23	12.49	11.83	11.88	13.83

* Exclusive of Providence city.

TABLE LXXI.

Mortality in the State from Tuberculous Diseases (Consumption), with the Percentage of the Whole Number of Deaths, from all causes, and the Sex, Parentage, and Locality, in the Aggregate of Different Periods, 1866-1903.

YEARS.	Total Deaths from Consumption.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.	2,718	17.66	1,244	1,474	1,567	1,151	122	231	219	891	1,051	204
1871-1875.	2,883	14.03	1,267	1,616	1,504	1,379	94	213	163	953	1,234	226
1876-1880.	3,271	14.66	1,435	1,836	1,473	1,798	104	194	188	1,048	1,498	239
1881-1885.	3,729	14.40	1,692	2,037	1,427	2,302	113	208	242	1,222	1,751	193
1886.....	826	14.12	382	444	308	518	23	43	57	276	368	59
1887.....	710	11.19	312	398	266	444	20	34	41	246	323	46
1888.....	800	12.13	391	409	284	516	28	55	32	273	362	50
1889.....	727	11.61	356	371	239	488	20	45	37	267	315	53
1890.....	852	12.29	422	430	280	572	31	38	51	305	394	33
1886-1890.	3,915	12.24	1,863	2,052	1,377	2,538	122	215	218	1,357	1,762	241
1891.....	740	11.18	380	360	248	492	17	47	51	236	347	42
1892.....	759	10.26	360	399	249	510	29	51	45	265	342	27
1893.....	722	9.72	364	358	230	492	18	55	35	259	328	27
1894.....	705	9.85	337	368	214	491	10	46	46	242	325	36
1895.....	839	11.13	392	447	284	555	29	54	59	271	394	32
1891-1895.	3,765	10.41	1,833	1,932	1,225	2,540	103	253	236	1,273	1,736	174
1896.....	846	11.27	409	437	273	573	27	59	66	292	367	35
1897.....	777	10.93	395	382	269	508	13	55	55	283	341	30
1898.....	886	12.83	460	426	272	614	29	54	60	307	405	31
1899.....	972	13.03	478	494	316	656	24	70	50	337	452	39
1900.....	987	11.19	514	473	324	663	30	46	52	333	486	40
1896-1900.	4,468	11.82	2,256	2,212	1,454	3,014	123	284	283	1,552	2,051	175
1901.....	990	12.43	524	466	299	691	25	55	55	337	474	44
1902.....	934	11.74	475	459	383	651	27	43	55	325	461	23
1903.....	1,021	11.81	543	478	319	702	27	45	55	365	502	27
Total, 38 years	27,694	12.90	13,132	14,562	10,928	16,766	860	1,741	1,714	9,323	12,520	1,536

*Exclusive of Providence city.

TUBERCULOUS DISEASES (CONSUMPTION). *Proportion of Deaths to Population.*

The proportion of deaths from consumption to the *population* in the different localities of the State, during the last eighteen years, may be seen in the following summaries:

For five years, 1886 to 1890, inclusive.

	Persons, One Death to every		In every 1,000 Of Population.
Bristol County.....	494.....	or.....	2.09
Kent County.....	569.....	or.....	1.85
Newport County.....	708.....	or.....	1.48
Providence County*.....	598.....	or.....	1.91
Providence City.....	356.....	or.....	2.82
Washington County.....	497.....	or.....	2.10
Whole State.....	420.....	or.....	2.40

For five years, 1891 to 1895, inclusive.

	Persons, One Death to every		In every 1,000 Of Population.
Bristol County.....	671.....	or.....	1.74
Kent County.....	577.....	or.....	1.73
Newport County.....	647.....	or.....	1.58
Providence County*.....	537.....	or.....	1.91
Providence City.....	413.....	or.....	2.57
Washington County.....	766.....	or.....	1.34
Whole State.....	497.....	or.....	2.02

For five years, 1896 to 1900, inclusive.

	Persons, One Death to every		In every 1,000 of Population.
Bristol County.....	538.....	or.....	1.86
Kent County.....	564.....	or.....	1.77
Newport County.....	562.....	or.....	1.78
Providence County*.....	487.....	or.....	2.05
Providence City.....	388.....	or.....	2.58
Washington County.....	716.....	or.....	1.39
Whole State.....	462.....	or.....	2.17

*Exclusive of Providence city.

1901.

	Persons, One Death to every	In every 1,000 Of Population.
Bristol County.....	536.....or.....	1.86
Kent County.....	554.....or.....	1.80
Newport County.....	1,080.....or.....	0.92
Newport City.....	498.....or.....	2.01
Providence County Towns.....	434.....or.....	2.30
Central Falls.....	422.....or.....	2.37
Pawtucket.....	532.....or.....	1.88
Providence City.....	380.....or.....	2.63
Woonsocket.....	482.....or.....	2.07
Washington County.....	553.....or.....	1.81
Whole State.....	442.....or.....	2.26

1902.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	540.....or.....	1.99
Kent County.....	717.....or.....	1.39
Newport County.....	1,100.....or.....	0.91
Newport City.....	504.....or.....	1.98
Providence County Towns.....	453.....or.....	2.21
Central Falls.....	727.....or.....	1.38
Pawtucket.....	545.....or.....	1.84
Providence City.....	404.....or.....	2.47
Woonsocket.....	415.....or.....	2.41
Washington County.....	1,060.....or.....	0.94
Whole State.....	479.....or.....	2.09

1903.

	Persons, One Death to every	In every 1,000 of Population.
Bristol County.....	517.....or.....	1.93
Kent County.....	702.....or.....	1.42
Newport County.....	871.....or.....	1.15
Newport City.....	553.....or.....	1.81
Providence County Towns.....	406.....or.....	2.46
Central Falls.....	537.....or.....	1.86
Pawtucket.....	582.....or.....	1.72
Providence City.....	382.....or.....	2.62
Woonsocket.....	451.....or.....	2.22
Washington County.....	918.....or.....	1.09
Whole State.....	457.....or.....	2.19

There was a slight increase in the mortality from tuberculous diseases, in 1903, as compared with the preceding year, in numbers, as well as in proportion to the population.

CROUP.

There were but 8 decedents from croup, in 1903, as against 18 in 1902.

Sex.—Of the 8 decedents from croup, in 1903, there were 4 males and 4 females.

Parentage.—There were no decedents of native parentage.

Age.—Seven of the decedents were under 5 years of age, and 1 of five years and under 10.

Season.—

First Quarter....	2	Third Quarter..	0
Second Quarter..	6	Fourth Quarter..	0
First half....	8	Second half.	0
Whole year.....		8	

The following Table will exhibit various facts in relation to mortality from croup for thirty-eight years:

TABLE LXXII.

Mortality in the State from Croup, from 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	227	1.47	112	115	96	131	6	13	19	82	99	8
1871-1875.....	367	1.79	198	169	164	203	13	30	13	131	169	11
1876.....	102	2.61	50	52	42	60	1	6	.....	26	65	4
1877.....	95	2.23	48	47	34	61	4	3	1	47	40	.....
1878.....	93	2.20	45	48	43	50	14	3	7	25	39	5
1879.....	96	2.28	58	38	40	56	3	6	15	25	43	4
1880.....	66	1.45	32	34	27	39	3	3	4	20	30	6
1876-1880.....	452	2.03	233	219	186	266	25	21	27	143	217	19
1881.....	101	2.16	45	56	38	63	2	6	4	38	49	2
1882.....	77	1.60	41	36	32	45	1	2	6	33	32	3
1883.....	71	1.40	32	39	33	38	1	6	4	25	35	.....
1884.....	80	1.55	40	40	32	48	2	11	4	29	34	.....
1885.....	94	1.74	45	49	42	52	4	8	6	46	28	2
1881-1885.....	423	1.63	203	220	177	246	10	33	24	171	178	7
1886.....	90	1.53	45	45	39	51	2	18	12	24	32	2
1887.....	113	1.79	58	55	43	70	9	12	4	43	39	6
1888.....	79	1.19	43	36	34	45	4	2	7	34	27	5
1889.....	80	1.28	37	43	24	56	3	15	1	27	33	1
1890.....	83	1.19	53	30	28	55	2	14	2	32	31	2
1866-1890.....	445	1.39	236	209	168	277	20	61	26	160	162	16
1891.....	67	1.46	40	27	17	50	1	11	11	27	16	1
1892.....	89	1.20	52	37	44	45	1	10	21	21	33	3
1893.....	50	.67	29	21	13	37	4	11	3	25	7	.....
1894.....	32	.45	16	16	10	22	1	7	2	15	7	.....
1895.....	30	.40	14	16	9	21	.....	6	4	11	9	.....
1891-1895.....	268	.84	151	117	93	175	7	45	41	99	72	.....
1896.....	24	.32	16	8	5	19	.....	4	.....	12	8	.....
1897.....	17	.24	11	6	4	13	.....	8	.....	5	4	.....
1898.....	9	.13	4	5	3	6	.....	2	.....	4	2	1
1899.....	11	.15	3	8	4	7	.....	.....	2	5	4	.....
1900.....	18	.20	9	9	6	12	.....	4	.....	4	9	1
1896-1900.....	79	.21	43	36	22	57	.....	18	2	30	27	2
1901.....	24	.30	11	13	7	17	1	8	.....	8	6	1
1902.....	18	.23	8	10	5	13	.....	2	1	11	4	.....
1903.....	8	.09	4	4	.....	8	.....	6	.....	2	.....	.....
Total, 38 years...	2,311	1.08	1,199	1,112	918	1,393	82	237	153	837	934	68

*Exclusive of Providence city.

DIARRHEA AND DYSENTERY.

There were 235 decedents from diarrhea and dysentery, in 1903. Of these, 139 were from diarrhea or enteritis (ages over 2 years), and the remainder, 96, from dysentery. This number represents 2.7 per cent. of all causes, and a proportion of .50 to every 1,000 of the population.

Sex.—Of the 235, 113 were males and 122 were females, or a proportion of 93 males to every 100 females.

Parentage.—There were, of the 235 decedents, 89 of native parentage and 146 of foreign parentage, or a proportion of about 164 of foreign parentage to every 100 of native.

Age.—There were 87 of the decedents from diarrhea and dysentery under 5 years of age, and there were 92 over 50 years of age, leaving 56 for all the 45 years between 5 and 50.

Locality.—Of the 235 decedents, 5 were in Bristol county; 13 in Kent county; 5 in Newport county; 202 in Providence county; and 10 in Washington county.

Season.—One hundred and seventy-five of the deaths from diarrhea and dysentery occurred during the months of July, August, September, and October.

The following Table will show the deaths from diarrhea and dysentery, with the percentage, sex, parentage, etc., for each of 38 years, beginning with 1866:

TABLE LXXIII.

Mortality in the State from Diarrhea and Dysentery, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	677	4.40	353	324	323	354	26	46	89	215	254	47
1871-1875.....	580	2.60	317	263	305	275	27	46	23	183	289	12
1876.....	122	2.96	66	56	52	70	3	6	2	41	65	5
1877.....	142	3.19	64	78	73	69	8	6	9	54	55	10
1878.....	93	2.09	42	51	51	42	5	8	2	34	39	5
1879.....	97	2.17	48	49	47	50	9	6	10	27	42	3
1880.....	98	2.03	49	49	50	48	4	6	10	32	42	4
1876-1880.....	552	2.47	269	283	273	279	29	32	33	188	243	27
1881.....	119	2.37	56	63	54	65	2	4	3	47	57	6
1882.....	158	3.11	75	83	69	89	2	4	28	57	64	3
1883.....	182	3.45	86	96	88	94	7	7	16	74	75	3
1884.....	153	2.98	74	79	69	84	10	5	11	66	56	5
1885.....	120	2.23	61	59	51	69	7	6	6	62	35	4
1881-1885.....	732	2.89	352	380	331	401	28	26	64	306	287	21
1886.....	159	2.72	64	95	70	89	7	11	1	73	59	8
1887.....	199	3.11	107	92	70	129	6	16	4	92	72	9
1888.....	157	2.31	69	88	97	60	6	8	3	54	71	15
1889.....	159	2.54	73	86	67	92	1	12	17	71	50	8
1890.....	182	2.62	84	98	74	108	5	9	22	77	63	6
1886-1890.....	856	2.68	397	459	378	478	25	56	47	367	315	46
1891.....	143	2.16	69	74	51	92	4	15	13	48	58	5
1892.....	199	2.69	100	99	82	117	6	14	8	76	89	6
1893.....	159	2.14	79	80	56	103	5	14	7	60	66	7
1894.....	124	1.73	61	63	36	88	.....	8	4	59	43	10
1895.....	101	1.34	38	63	40	61	6	9	3	41	37	5
1891-1895.....	726	2.01	347	379	265	461	21	60	35	284	293	33
1896.....	89	1.18	49	40	40	49	2	5	8	39	28	7
1897.....	107	1.50	48	59	37	70	1	14	7	41	36	8
1898.....	98	1.42	53	45	33	65	2	14	5	32	40	5
1899.....	111	1.47	49	62	34	77	.....	9	11	55	32	4
1900.....	112	1.27	49	63	48	64	6	18	8	40	31	9
1896-1900.....	517	1.37	248	269	192	325	11	60	39	207	167	33
1901.....	96	1.20	43	53	35	61	8	10	2	25	49	2
1902.....	267	3.36	119	148	104	163	5	22	12	104	116	8
1903.....	235	2.72	113	122	89	146	5	13	5	94	108	10
Total, 38 years...	5,238	2.44	2,558	2,680	2,295	2,943	185	371	349	1,973	2,121	239

*Exclusive of Providence city.

DIPHTHERIA.

The number of deaths from diphtheria, in 1903, was 189, which was 41 more than in 1902.

This number represents 2.2 per cent. of all causes, or a proportion of .41 to every one thousand of the population.

Sex.—Of the 189 decedents, 96 were males and 93 were females.

Parentage.—There were 73 of native and 88 of foreign parentage, or a proportion of about 121 of foreign parentage to every 100 of native.

Season.—There were 51 deaths from diphtheria in the first quarter, 36 in the second quarter, 45 in the third quarter, and 57 in the fourth quarter.

Age.—There were 125 deaths under 5 years of age, 54 between 5 and 10, 6 between 10 and 15, 3 between 15 and 20, and 1 above 20 years of age.

Locality.—Of the 189 decedents, 150 were in Providence county, 5 in Bristol county, 12 in Kent county, 16 in Newport county, and 6 in Washington county.

The following Table shows the mortality in the State from diphtheria for thirty-eight years, beginning with 1866, also the percentage of deaths, the sex, parentage, etc.:

TABLE LXXIV.

Mortality in the State from Diphtheria, 1866 to 1903.

YEARS.	Whole Number of Deaths all causes.	Number of Deaths from Diphtheria.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.						
				Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.	
1866-1870..	15,391	181	1.18	83	98	103	78	5	28	30	40	44	34	
1871-1875..	20,540	242	1.18	118	124	154	88	4	35	20	54	105	24	
1876.....	4,116	159	3.86	77	82	69	90	1	2	9	29	111	7	
1877.....	4,450	492	11.56	239	253	233	259	12	44	2	122	295	17	
1878.....	4,441	435	9.80	224	211	201	234	21	29	23	106	245	11	
1879.....	4,472	259	5.79	121	138	143	116	7	19	20	95	106	12	
1880.....	4,829	152	3.40	73	79	75	77	3	6	2	63	61	17	
1876-1880..	22,308	1,497	6.71	734	763	721	776	44	100	56	415	818	64	
1881.....	5,016	216	4.63	106	110	118	98	10	16	8	53	116	13	
1882.....	5,074	101	1.99	48	53	55	46	.....	3	4	29	48	17
1883.....	5,282	95	1.88	39	56	45	50	1	7	3	26	54	4	
1884.....	5,141	119	2.31	65	54	47	72	8	1	9	39	58	4	
1885.....	5,389	99	1.83	47	52	48	51	5	5	6	39	37	7	
1881-1885..	25,902	630	2.43	305	325	313	317	24	32	30	186	313	45	
1886.....	5,849	228	3.90	98	130	101	127	20	21	23	64	98	2	
1887.....	6,340	287	4.53	135	152	101	186	15	11	4	114	108	35	
1888.....	6,594	191	2.86	87	104	79	112	13	3	9	58	98	10	
1889.....	6,259	184	2.93	80	104	89	95	3	10	11	56	97	7	
1890.....	6,934	211	3.04	112	99	93	118	1	9	16	86	94	5	
1886-1890..	31,976	1,101	3.44	512	589	463	638	52	54	63	378	495	59	
1891.....	6,620	102	1.50	52	50	48	54	2	7	6	40	47	.....
1892.....	7,396	89	1.20	48	41	44	45	1	1	8	23	39	17	
1893.....	7,440	157	2.11	75	82	57	100	1	11	13	67	65	.....
1894.....	7,160	133	1.86	74	59	61	72	.....	3	8	72	47	3
1895.....	7,533	340	4.51	166	174	145	195	3	7	6	221	94	9	
1891-1895..	36,151	821	2.24	415	406	355	466	7	29	41	423	292	29	
1896.....	7,504	283	3.77	149	134	120	163	5	19	6	109	140	4	
1897.....	7,110	231	3.25	120	111	84	147	3	19	8	111	86	4	
1898.....	6,905	93	1.35	51	42	34	59	.....	12	5	32	40	4
1899.....	7,458	86	1.15	35	51	31	55	1	10	4	28	40	3	
1900.....	8,823	190	2.15	106	84	76	114	5	22	15	83	53	12	
1896-1900..	37,800	883	2.34	461	422	345	538	14	82	38	363	359	27	
1901.....	7,966	177	2.22	92	85	67	110	2	13	10	66	84	2	
1902.....	7,955	148	1.86	64	84	55	93	4	9	12	52	69	2	
1903.....	8,642	189	2.19	96	93	73	116	5	12	16	68	82	6	
Total, 38 years	214,631	5,869	2.73	2,880	2,989	2,649	3,220	161	394	316	2,015	2,661	292	

*Exclusive of Providence city.

FEVER, MALARIAL.

The number of deaths, during 1903, from diseases classed as fever malarial, was 29. The number in 1902 was 19; in 1901 was 23; in 1900 was 21; in 1899 was 30; in 1898 was 31; in 1897 was 44; in 1896 was 42; in 1895 was 29; in 1894 was 26; in 1893 was 20; in 1892 was 36; in 1891, 31; in 1890, 42; in 1889, 40; in 1888, 71; in 1887, 85; in 1886, 44; in 1885, 30; 1884, 25.

Sex.—Of the 29 decedents from malarial fevers, in 1903, 12 were males and 17 were females.

Parentage.—There were, of the 29 decedents from malarial diseases, 7 of native parentage and 22 of foreign.

Season.—The deaths from malarial diseases occurred in the different seasons of the year as follows:

First Quarter.....	6	Third Quarter.....	12
Second Quarter.....	3	Fourth Quarter.....	8
<hr/>		<hr/>	
First half.....	9	Second half.....	20
<hr/>		<hr/>	
Whole year.....		29	

Age.—The number of decedents in the different periods of life was as follows:

Under 5 years of age.....	9
From 5 to 20 years of age.....	2
From 20 to 40 years of age.....	1
From 40 to 60 years of age.....	4
60 and over.....	13
<hr/>	
Total.....	29

Locality.—Of the deaths from malarial fever in 1903, 2 occurred in Kent county, 1 in Newport county, 25 in Providence county, and 1 in Washington county.

FEVERS, TYPHOID, ETC.

The following Table exhibits, for each of the last thirty-eight years, the number and the percentage and the sex and parentage of the decedents from fevers returned as from typhoid, and the number in each division of the State:

TABLE LXXV.

Mortality in the State from Fevers, Typhoid, etc., 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870....	641	4.2	314	327	398	243	35	39	77	243	184	63
1871-1875....	740	3.5	350	390	419	321	12	43	34	263	299	89
1876.....	126	3.0	65	61	71	55	5	9	13	44	33	22
1877.....	134	3.0	63	71	65	69	8	10	8	52	44	12
1878.....	150	3.4	68	82	77	73	13	13	6	59	47	12
1879.....	114	2.7	47	67	63	51	4	13	6	44	40	7
1880.....	158	3.4	74	84	94	64	8	12	5	66	52	15
1876-1880	682	3.1	317	365	370	312	38	57	38	265	216	68
1881.....	143	2.8	74	69	74	69	4	13	14	58	41	13
1882.....	229	4.7	111	118	100	129	6	11	5	56	145	6
1883.....	258	4.8	146	112	117	141	9	16	10	82	134	7
1884.....	165	3.2	83	82	78	87	7	7	12	66	64	9
1885.....	158	2.9	71	87	70	88	6	14	8	69	53	8
1881-1885	953	3.7	485	468	439	514	32	61	49	331	437	43
1886.....	169	2.9	78	91	76	93	6	8	11	66	70	8
1887.....	127	2.0	67	60	58	69	2	14	9	49	38	15
1888.....	235	3.6	125	110	88	147	20	24	14	66	102	9
1889.....	143	2.3	85	58	56	87	2	17	9	46	60	9
1890.....	107	1.5	58	49	39	68	7	8	5	37	43	7
1886-1890	781	2.5	413	368	317	464	37	71	48	264	313	48
1891.....	149	2.2	86	63	56	93	5	8	17	46	63	10
1892.....	133	1.8	75	58	55	78	5	12	9	49	51	7
1893.....	115	1.6	65	50	41	74	4	7	5	40	52	7
1894.....	159	2.2	93	66	46	113	5	13	13	56	70	2
1895.....	125	1.7	73	52	55	70	3	7	11	52	48	4
1891-1895	681	1.9	392	289	253	428	22	47	55	243	284	30
1896.....	113	1.5	66	47	44	69	6	8	9	39	43	8
1897.....	66	0.9	43	23	33	33	4	4	4	25	23	6
1898.....	76	1.1	49	27	23	53	2	3	11	20	39	1
1899.....	90	1.2	53	37	41	49	3	6	9	24	42	6
1900.....	127	1.4	70	57	51	76	4	6	23	43	39	12
1896-1900....	472	1.2	281	191	192	280	19	27	56	151	186	33
1901.....	103	1.3	62	41	34	69	7	5	11	28	46	6
1902.....	91	1.1	52	39	29	62	2	5	12	30	38	4
1903.....	86	1.0	47	39	27	59	2	11	5	21	39	8
Total, 38 years....	5,230	2.4	2,713	2,517	2,478	2,752	206	366	385	1,839	2,042	392

*Exclusive of Providence city.

During 1903, of the 86 decedents from typhoid fever, there were 47 males and 39 females.

During the period of thirty-eight years, 1866 to 1903, inclusive, the proportions of the sexes of the decedents from typhoid fever in the State were 93 females to every 100 males.

Parentage.—There were 27 decedents from enteric fever, of native parentage, in 1903, and 59 of foreign parentage.

Season.—

First Quarter.....	17	Third Quarter.....	27
Second Quarter.....	19	Fourth Quarter.....	23
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First half.....	36	Second half.....	50
Whole year.....		86	

The following Table shows the number of decedents from fevers, in each division of ages, in each of the last thirty-eight years, in the State of Rhode Island.

TABLE LXXVI.

Mortality from Typhoid Fever in Age Periods.

YEARS.	PERIODS OF LIFE.										80 and over.	Not stated.
	Under 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.			
1886.....	23	10	21	26	21	16	9	14	10	.....	.....
1867.....	17	6	23	33	12	11	8	4	2	2	1	
1868.....	10	7	10	21	8	8	10	5	5	.....	.....
1869.....	10	8	14	28	9	7	9	8	6	2	.....
1870.....	26	13	31	46	19	25	8	8	8	2	1	
1871.....	13	10	20	28	18	16	9	4	5	2	.....
1872.....	17	18	34	54	20	9	12	11	3	1	.....
1873.....	27	12	34	31	25	13	13	7	8	2	.....
1874.....	10	14	26	32	9	5	10	3	6	2	.....
1875.....	23	14	19	43	18	10	10	6	4	.....	.....
1876.....	21	10	15	24	14	9	6	16	6	3	2	
1877.....	22	13	18	36	20	8	5	7	2	2	1	
1878.....	17	16	27	47	13	11	12	2	3	2	.....
1879.....	19	7	14	26	15	6	3	12	8	3	1	
1880.....	25	12	24	43	23	12	10	5	3	.....	1
1881.....	25	9	19	29	14	11	9	12	11	4	.....
1882.....	21	22	44	69	27	14	9	10	9	1	.....
1883.....	36	25	46	75	31	12	11	10	8	2	2	
1884.....	24	13	19	47	22	9	12	10	5	3	1	
1885.....	35	12	16	25	26	11	11	12	6	4	.....
1886.....	29	9	25	41	20	14	17	8	5	1	.....
1887.....	24	8	16	31	16	10	5	8	4	4	1	
1888.....	27	27	42	75	29	16	12	3	4	.....	.....
1889.....	18	12	29	41	18	8	9	5	3	.....	.....
1890.....	13	11	13	35	14	5	6	6	4	.....	.....
1891.....	12	10	25	50	26	10	7	6	2	.....	1
1892.....	10	11	18	42	20	15	10	6	1	.....	.....
1893.....	6	7	16	43	15	10	10	6	2	.....	.....
1894.....	18	8	31	57	21	12	6	3	2	.....	1
1895.....	10	9	10	56	15	7	9	5	4	.....	.....
1896.....	10	3	18	35	13	16	6	7	5	.....	.....
1897.....	6	4	7	22	11	9	3	3	1	.....	.....
1898.....	8	5	8	23	21	9	1	1	.....	.....	.....
1899.....	17	15	5	19	17	10	2	1	2	1	1	
1900.....	13	9	17	41	23	12	6	2	1	.....	.....
1901.....	8	4	12	25	29	16	5	3	1	.....	.....
1902.....	6	4	9	31	19	11	3	4	3	.....	1
1903.....	13	7	7	23	27	2	5	2	.....	.....	.....
Total, 38 years	672	414	782	1,456	718	415	308	245	162	43	15	

TABLE LXXVII.

Comparative Exhibit of the Percentage of Deaths from Typhoid Fever to Total Deaths from specified causes, in Six New England States, for twenty-eight years, 1876 to 1903.

STATES.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	
RHODE ISLAND.....	3.0	3.0	3.4	2.7	3.4	2.8	4.7	4.8	3.2	2.9	2.9	2.0	3.6	2.2	1.5	2.2	1.8	1.6	2.2	1.7	1.5	0.9	1.1	1.2	1.4	1.3	1.1	1.0	
Maine.....																	2.4	2.6	2.5	1.9	1.7	1.3	1.9	1.7	1.7	2.1	1.6	1.7	
New Hampshire.....									2.2	2.3	0.2	1.2	2.2	4.1	9.2	4.1	3.1	4.1	7.1	4.1	9.1	3.1	3.1	2.1	2.1	3.1	0.1	1.1	1.2
Vermont.....	4.2	4.8	3.4	2.7	3.5	5.3	4.3	1.3	0.2	2.2	2.5	2.2	2.7	1.6	1.6	1.4	2.5	2.0	1.7	1.6	1.3	1.7	1.9	1.9	1.6	1.0	1.5		
Massachuset(s).....	2.7	2.7	2.3	1.9	2.5	2.9	2.3	2.4	2.0	2.1	2.3	2.2	2.2	1.9	1.8	1.7	1.5	1.6	1.4	1.5	1.3	1.4	1.3	1.3	1.2	1.1	1.1		
Connecticut.....	3.6	3.3	2.7	1.8	2.5	2.5	3.1	2.1	2.5	1.1	2.2	1.2	2.2	2.2	3.2	3.2	2.0	1.8	1.8	1.5	1.1	1.3	1.3	1.8	1.9	1.5	1.4		

DISEASES OF THE HEART.

The number of decedents from the various forms of diseases of the heart, as reported in 1903, was 726. The number is 22 greater than that of 1902.

This number represents 8.4 per cent. of all causes, and a proportion of 1.57 to every 1,000 of the population.

Sex.—There were 375 male decedents and 351 female decedents; a proportion of about 107 males to every 100 females.

Parentage.—Of the 726 decedents from diseases of the heart, in 1903, there were 313 of native parentage and 413 of foreign, a proportion of about 76 of native parentage to every 100 of foreign. Until recently it has been the invariable rule of the whole period of registration that the native population is more subject to heart disease than the foreign.

The following Table exhibits, for each of the last thirty-eight years, 1866 to 1903, inclusive, the number and percentage, and the sex and parentage, of the decedents from diseases of the heart, and the number of the same, in each division of the State:

TABLE LXXVIII.

Mortality from Diseases of the Heart, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	590	3.83	308	282	395	195	22	48	48	184	262	26
1871-1875.....	922	4.49	458	464	595	327	21	46	82	248	465	60
1876.....	166	4.03	86	80	109	57	9	11	10	38	86	12
1877.....	182	4.09	94	88	110	72	3	7	9	57	93	13
1878.....	166	3.73	88	78	109	57	5	11	15	38	83	14
1879.....	202	4.78	114	88	127	75	8	20	16	38	111	9
1880.....	231	5.03	125	106	146	85	9	2	29	59	104	9
1876-1880.....	947	4.25	507	440	601	346	34	70	79	230	477	57
1881.....	264	5.65	131	133	154	110	9	21	24	73	121	16
1882.....	255	5.31	116	139	162	93	8	16	23	55	142	11
1883.....	325	6.20	167	158	179	146	8	27	30	70	172	18
1884.....	285	5.60	135	150	163	122	6	16	25	87	139	12
1885.....	349	6.48	162	187	198	151	13	27	25	94	159	31
1881-1885.....	1,478	5.71	711	767	856	622	44	107	127	379	733	88
1886.....	330	5.20	152	178	184	146	12	20	18	82	168	30
1887.....	406	6.40	205	201	240	166	7	21	36	123	193	26
1888.....	436	6.56	196	240	240	196	11	22	40	122	210	31
1889.....	460	7.35	233	227	258	202	19	31	39	143	199	29
1890.....	405	5.84	222	183	219	186	15	49	27	114	172	28
1886-1890.....	2,037	6.37	1,008	1,029	1,141	896	64	143	160	584	942	144
1891.....	480	7.25	248	232	244	236	21	37	38	137	210	37
1892.....	506	6.84	260	246	252	254	22	47	48	163	200	26
1893.....	535	7.19	264	271	264	271	20	43	30	174	238	30
1894.....	476	6.65	251	225	246	230	16	32	41	161	192	34
1895.....	535	7.10	260	275	275	260	14	41	54	180	210	36
1891-1895.....	2,532	7.01	1,283	1,249	1,281	1,251	93	200	211	815	1,050	163
1896.....	556	7.41	294	262	266	290	19	40	38	189	231	30
1897.....	570	8.02	305	265	295	275	9	38	42	200	230	51
1898.....	549	7.95	295	254	282	267	17	42	44	171	237	38
1899.....	648	8.68	314	334	334	314	20	56	72	190	267	43
1900.....	701	7.95	319	382	319	382	22	49	57	241	284	48
1896-1900.....	3,024	8.00	1,527	1,497	1,496	1,528	87	225	253	991	1,249	219
1901.....	685	8.60	341	344	303	382	20	46	60	245	273	41
1902.....	704	8.85	363	341	323	381	25	48	59	241	281	50
1903.....	726	8.40	375	351	313	413	26	41	46	239	325	49
Total, 38 years..	13,645	6.36	6,881	6,764	7,304	6,341	436	974	1,125	4,156	6,057	897

*Exclusive of Providence city.

Sex.—Of the 13,645 persons deceased from diseases of the heart, in the last thirty-eight years, 6,881 were males and 6,764 were females; or 102 males to each 100 females.

Parentage.—Of the 13,645 decedents, during thirty-eight years, 7,304 were of native parentage and 6,341 of foreign. The proportions would, therefore, stand as follows: To every 100 of foreign parentage there were about 115 of native; or about 47 native and 53 of foreign parentage in every 100 deaths. In 1903 there were 100 more deaths of foreign than of native parentage, or about 43 of native and 57 of foreign in every 100 deaths.

Diseases of the heart rank third in the order of causes in 1903.

The following Table shows the number of decedents from diseases of the heart, in each divisional period of life, in each of the last thirty-eight years:

TABLE LXXIX.

Mortality from Diseases of the Heart, in Age Periods.

YEARS.	PERIODS OF LIFE.								Not stated
	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	
1866.....	18	8	14	17	10	23	21	4	.....
1867.....	11	11	10	13	22	16	27	4	.....
1868.....	15	5	13	11	14	28	25	5	.....
1869.....	21	4	14	18	20	22	21	7	1
1870.....	19	6	11	13	20	21	23	3	1
1871.....	9	12	10	19	23	36	28	6	1
1872.....	27	12	22	19	31	36	29	13	.....
1873.....	19	11	28	18	25	35	42	9	2
1874.....	20	16	26	21	27	50	40	12	2
1875.....	14	16	25	20	32	29	41	9	.....
1876.....	14	10	15	19	20	38	39	10	1
1877.....	15	11	29	18	27	45	33	13	.....
1878.....	16	8	18	16	26	36	35	11	.....
1879.....	19	9	13	25	33	51	36	16	.....
1880.....	15	10	18	23	38	49	49	28	1
1881.....	32	13	26	33	37	49	53	21	.....
1882.....	22	17	24	25	36	51	61	17	2
1883.....	39	13	21	33	52	65	76	26	.....
1884.....	15	25	21	32	45	61	50	32	4
1885.....	38	13	24	42	61	69	78	24	.....
1886.....	39	18	28	38	52	68	69	18	.....
1887.....	52	30	23	35	61	79	87	39	.....
1888.....	39	25	30	54	84	97	74	33	.....
1889.....	45	25	37	45	69	85	118	35	1
1890.....	34	15	24	53	69	78	96	36	.....
1891.....	40	18	45	41	85	109	101	38	3
1892.....	54	21	32	59	93	111	104	31	1
1893.....	55	27	48	68	81	116	97	42	1
1894.....	40	28	36	64	69	102	102	35	.....
1895.....	33	20	44	57	82	137	111	51	.....
1896.....	40	33	46	65	98	106	117	50	1
1897.....	40	34	43	68	74	145	117	49	.....
1898.....	34	22	31	57	91	134	130	50	.....
1899.....	23	28	37	77	111	153	169	48	2
1900.....	47	32	49	61	130	164	164	52	2
1901.....	40	40	55	65	124	152	139	68	2
1902.....	25	37	51	77	127	161	144	79	3
1903.....	30	31	34	73	138	188	156	75	1
Total, 38 years...	1,108	714	1,066	1,492	2,237	2,995	2,902	1,099	32

The results of thirty-eight years of registration, with record of ages of decedents from diseases of the heart, show, in periods of twenty years each of life, the following percentages:

Under 20 years of age.....	8.1 per cent.
Between 20 and 40.....	13.1 per cent.
Between 40 and 60.....	27.3 per cent.
Between 60 and 80.....	43.2 per cent.
Over 80.....	8.1 per cent.
Not stated.....	.2 per cent.
<hr/>	
Total.....	100.0 per cent.

It will be seen that 43 per cent. of all the deaths from diseases of the heart were of persons over sixty years of age, and under eighty.

Diseases of the heart have acquired large importance as a cause of death. From 38.7 in every 1,000 deaths from all causes, in 1866, heart diseases have gradually increased to 84.0 in every 1,000 in 1903.

INFLUENZA.

The event, during the first four months of the year 1890, of a very extraordinary and perhaps unprecedented prevalence of a form of influenza, which was unlike that of ordinary occurrence in that it affected indiscriminately all the functions and nearly all the organs of the body, varying with the individuals attacked, and the re-appearance of the same, although in greatly lessened numbers, in 1891, warrants a continued notice not given previous to 1890 in the Registration Reports to the affection so named.

The disease was, in 1890, mostly largely confined to the respiratory passages, and resulted in a largely increased mortality from bronchitis and consumption. During 1891 the disease was equally as severe, affecting in a larger measure the brain and other nerve centres, and the direct mortality was even larger than that of 1890. The prevalence was largest during the second quarter of the year, and again in December.

The increase in December of 1891 was followed by a sudden augmentation in the first four months of the following year, 1892, the greatest number of deaths, 198, occurring in January of 1892. The total for 1892 was 336, or about twice as much as for either of the previous years. In 1893 there were 84 deaths reported as resulting from influenza. This was 251 less than in 1892. In 1894 there were 166 deaths from influenza reported, an increase of 95 per cent. from 1893, and a decrease of over 50 per cent. from 1892.

From influenza there were 115 deaths in 1895, in 1896 there were but 42 deaths, in 1897 there were 153 deaths, in 1898 there were 75 deaths, in 1899 there were 219 deaths, in 1900 there were 255 deaths, in 1901 there were 146 deaths, in 1902 there were but 37 deaths, and in 1903 there were 142 deaths.

Sex.—Of the 142 deaths from influenza, in 1903, 61 were males and 81 were females.

Parentage.—The parent nativity of the decedents was 68 of native and 74 of foreign.

Season.—Of the 142 deaths from influenza, during 1903, 103 occurred in the first quarter of the year, 27 in the second, 1 in the third quarter, and 11 in the fourth quarter.

Age.—There were 24 under 5 years of age, 5 from 5 to 20 years, 13 from 20 to 40, 22 from 40 to 60, 51 from 60 to 80, 27 from 80 years of age and over.

The following Tables will show the proportionate nativity, sex, and locality of the disease, for the past fourteen years.

The greatest mortality appears to be among females, there being 151 females to every 100 males. The parentage appears to be nearly equally divided between native and foreign, there being 103 foreign to 100 native.

The largest number of deaths occurred in Providence city, but this is not out of proportion to the proportionate number and density of population.

Referring to the age periods, it will be seen that the greatest mortality occurred in the period from 70 to 80, there being 459, or 21.69 per cent. of the whole number of deaths from this disease. Taking the three decennials, including 60 to 90, we have 1,104 deaths, or 52.17 per cent. of all by ages.

By season, the greatest number of deaths, 620, occurred in January; the next in number, 362, in February; followed by 326 in March, 321 in April, and 205 in December.

Mortality in the State from Influenza, 1890 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1890.....	168	2.42	72	96	68	100	6	14	12	61	70	5
1891.....	177	2.67	67	110	91	86	7	14	14	60	69	13
1892.....	366	4.54	142	194	170	166	11	27	13	115	144	26
1893.....	85	1.14	34	51	47	38	7	3	5	33	32	5
1894.....	166	2.32	62	104	88	78	6	9	15	48	75	13
1895.....	115	1.53	48	67	63	52	3	10	9	42	41	10
1896.....	42	.56	15	27	16	26	2	1	2	30	6	1
1897.....	153	2.15	52	101	72	81	3	6	3	72	64	5
1898.....	75	1.09	29	46	40	35	8	3	5	30	26	3
1899.....	219	2.94	82	137	104	115	9	6	14	94	80	16
1900.....	255	2.89	108	147	120	135	8	14	16	112	98	7
1901.....	146	1.83	55	91	79	67	8	6	3	52	67	10
1902.....	37	.47	17	20	17	20	3	2	1	18	12	1
1903.....	142	1.65	61	81	68	74	9	6	1	51	65	10
1890-1903.....	2,116	1.54	844	1,272	1,043	1,073	90	121	113	818	849	125

Influenza by Age Periods, 1890 to 1903.

YEARS.	Under 1.	1 to 5.	5 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Not stated.
1890.....	14	18	4	8	14	22	18	17	19	17	11	5	1
1891.....	11	12	....	8	14	6	14	21	29	42	19	1	....
1892.....	26	20	2	6	13	19	25	33	74	74	41	3	....
1893.....	7	5	4	3	6	1	7	4	13	16	16	2	1
1894.....	6	14	2	5	11	6	20	12	32	37	17	4	....
1895.....	14	10	1	5	8	6	9	10	16	24	9	3	....
1896.....	1	3	2	1	1	2	2	4	13	6	6	1	....
1897.....	11	1	2	5	2	10	10	22	22	38	25	5	....
1898.....	12	4	1	1	4	6	5	8	7	13	8	6	....
1899.....	27	15	3	4	11	13	13	26	24	53	23	7	....
1900.....	9	7	1	2	14	9	13	25	56	65	54	....	....
1901.....	14	2	3	2	4	9	6	18	29	35	24	....	....
1902.....	9	1	....	1	....	1	1	3	5	9	5	2	....
1903.....	14	10	2	3	6	7	12	10	21	30	27	....	....
1890-1903.....	175	122	27	54	108	117	155	213	360	459	285	39	2
Per cent. of all ages for 14 yrs., 1890-1903.	8.27	5.77	1.28	2.55	5.10	5.53	7.33	10.07	17.01	21.69	13.47	1.84	.09

*Not including Providence city.

Influenza by Months, 1890 to 1903, inclusive.

YEARS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL
1890.	108	27	11	8	4	2	2	.....	1	3	1	1	168
1891.	4	3	1	22	19	19	2	2	2	4	1	98	177
1892.	198	52	31	27	9	6	.....	2	3	2	1	5	336
1893.	5	1	2	19	12	4	1	2	1	1	1	36	85
1894.	102	27	10	9	7	3	2	1	1	.....	1	3	166
1895.	12	20	43	16	7	6	5	.....	.....	.....	2	4	115
1896.	9	4	5	7	5	4	1	2	2	1	.....	2	42
1897.	26	67	29	11	4	3	.....	.....	2	2	3	6	153
1898.	7	2	15	13	9	5	2	.....	1	.....	1	20	75
1899.	93	59	27	16	7	1	.....	3	1	2	2	8	219
1900.	5	16	53	134	26	8	.....	3	.....	1	4	5	255
1901.	38	48	27	13	9	3	.....	.....	1	.....	3	4	146
1902.	4	3	11	8	3	1	.....	.....	.....	.....	1	6	37
1903.	9	33	61	18	7	2	.....	.....	1	.....	4	7	142
1890-1903.	620	362	326	321	128	67	15	15	16	16	25	205	2,116

INSANITY.

There were 77 deaths from insanity, in 1903. The percentage to the whole number of deaths was .89.

Sex.—There were 35 male and 42 female decedents.

Parentage.—The number of native decedents from insanity was 37, and of foreign parentage 40.

Of the 77 deaths in 1903, there were 15 from dementia, 19 from insanity, 21 from general paralysis, 13 from acute mania, 2 from chronic mania, and 7 from melancholia. There were other deaths of insane persons, but as insanity was not the immediate cause of death these deaths were not classed under insanity.

The following Table shows the mortality in the State from insanity for thirty-eight years, with percentage to deaths from all causes, sex, parentage, etc., from 1866 to 1903, inclusive:

TABLE LXXX.

Mortality in the State from Insanity, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	72	.47	33	39	52	20	.....	5	4	7	55	1
1871-1875.....	106	.52	55	51	76	30	3	2	8	33	58	2
1876.....	12	.28	5	7	9	3	1	2	1	1	6	1
1877.....	19	.49	9	10	9	10	.....	1	.....	5	12	1
1878.....	22	.50	5	17	16	6	.....	.....	1	3	17	1
1879.....	17	.40	11	6	10	7	.....	.....	.....	5	11	1
1880.....	19	.39	9	10	13	6	.....	1	2	6	9	1
1876-1880.....	89	.39	39	50	57	32	1	4	4	20	55	5
1881.....	32	.63	15	17	22	10	1	1	3	10	16	1
1882.....	23	.45	9	14	18	5	.....	1	.....	8	12	2
1883.....	29	.55	12	17	17	12	1	2	.....	7	18	1
1884.....	36	.69	17	19	24	12	2	3	.....	21	9	1
1885.....	35	.67	16	19	18	17	.....	.....	2	23	10	.....
1881-1885.....	155	.59	69	86	99	56	4	7	5	69	65	5
1886.....	49	.83	21	28	28	21	3	1	1	37	7	.....
1887.....	64	1.01	35	29	33	31	1	.....	1	56	.....	6
1888.....	43	.64	21	22	24	19	1	2	.....	33	7	.....
1889.....	22	.35	14	8	12	10	.....	.....	.....	14	8	.....
1890.....	30	.44	19	11	16	14	1	1	1	13	14	.....
1886-1890.....	208	.65	110	98	113	95	6	4	3	153	36	6
1891.....	21	.32	10	11	16	5	.....	1	.....	5	13	2
1892.....	27	.37	17	10	15	12	3	1	.....	8	14	1
1893.....	39	.53	14	25	13	26	.....	.....	.....	30	9	.....
1894.....	49	.68	20	29	22	27	1	1	.....	27	18	2
1895.....	72	.96	36	36	44	28	3	.....	1	41	27	.....
1891-1895.....	208	.57	97	111	110	98	7	3	1	111	81	5
1896.....	53	.70	28	25	22	31	.....	2	.....	40	11	.....
1897.....	103	1.45	53	50	51	52	.....	3	4	78	12	6
1898.....	82	1.19	41	41	37	45	3	.....	2	60	10	7
1899.....	66	.88	37	29	33	33	3	2	1	55	5	.....
1900.....	54	.61	29	25	33	21	1	1	2	45	5	.....
1896-1900.....	358	.95	188	170	176	182	7	8	9	278	43	13
1901.....	33	.41	18	15	10	23	.....	.....	.....	26	7	.....
1902.....	17	.21	10	7	9	8	3	5	.....	6	3	.....
1903.....	77	.89	35	42	37	40	.....	2	.....	72	2	1
Total, 38 years...	1,323	.62	654	669	739	584	31	40	60	756	398	38

*Exclusive of Providence city.

DISEASES OF THE KIDNEYS.

There were 617 deaths returned, during 1903, with diseases of the kidneys assigned as the cause.

This number represents 7.1 per cent. of all causes, and a proportion of 1.32 to every 1,000 of the population.

Sex.—Of the 617 there were 347 males and 270 females.

Parentage.—There were 271 of native parentage and 346 of foreign, or about 78 of native to every 100 of foreign parentage.

Age.—Of the 617 decedents from kidney diseases, 24 were under five years of age, 28 from five to twenty, 113 from twenty to forty, 181 from forty to sixty, 219 from sixty to eighty, 50 eighty and over, and 2 ages unstated.

Diseases of the kidneys have largely increased in number, and much more largely in proportion, during the last thirty-eight years.

During the ten years from 1866 to 1875, inclusive, the proportion of deaths from kidney diseases, to whole number of deaths from all causes, was but little more than one per cent., while during the ten years from 1891 to 1900, inclusive, the proportion was very nearly five per cent.

The following Table will present various facts in relation to the mortality from diseases of the kidneys in Rhode Island, for thirty-eight years, 1866–1903:

TABLE LXXXI.

Mortality in the State from Kidney Diseases, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	135	.88	94	41	91	44	6	7	25	23	66	8
1871-1875.....	295	1.44	167	128	187	108	11	11	17	67	172	17
1876.....	50	1.28	22	28	32	18	1	1	7	10	28	3
1877.....	67	1.57	40	27	35	32	2	1	.....	14	49	1
1878.....	80	1.89	50	30	49	31	4	3	3	21	47	2
1879.....	79	1.88	51	28	44	35	1	3	1	23	43	8
1880.....	91	2.02	52	39	51	40	1	5	10	27	46	2
1876-1880.....	367	1.65	215	152	211	156	9	13	21	95	213	16
1881.....	79	1.69	40	39	47	32	7	5	4	14	48	1
1882.....	86	1.79	50	36	45	41	2	5	10	15	52	2
1883.....	129	2.43	72	57	74	55	5	2	17	37	60	8
1884.....	118	2.29	53	65	66	52	5	11	12	28	54	8
1885.....	159	2.97	92	67	86	73	8	10	17	31	88	5
1881-1885.....	571	2.20	307	264	318	253	27	33	60	125	302	24
1886.....	155	2.49	85	70	93	62	3	10	22	37	71	12
1887.....	169	2.66	92	77	90	79	5	6	16	43	92	7
1888.....	213	3.23	102	111	122	91	10	10	24	46	115	8
1889.....	210	3.38	119	91	122	88	14	13	15	62	96	10
1890.....	229	3.20	116	113	109	120	15	8	21	59	116	10
1886-1890.....	976	3.05	514	462	536	440	47	47	98	247	490	47
1891.....	245	3.06	123	122	122	123	9	12	25	72	114	13
1892.....	258	3.49	135	123	127	131	9	11	24	70	128	16
1893.....	302	4.06	154	148	141	161	19	15	25	81	147	15
1894.....	313	4.37	152	161	164	149	22	20	33	84	136	18
1895.....	341	4.54	176	165	171	170	23	19	29	96	163	11
1891-1895.....	1,459	3.90	740	720	725	734	82	77	136	403	688	73
1896.....	395	5.26	209	186	188	207	19	39	34	125	160	18
1897.....	387	5.44	198	189	185	202	24	19	30	129	164	21
1898.....	471	6.82	228	243	207	264	19	23	25	153	219	32
1899.....	477	6.40	241	236	215	262	23	30	33	148	223	20
1900.....	516	5.85	240	276	275	241	16	19	25	186	236	34
1896-1900.....	2,246	5.94	1,116	1,130	1,070	1,176	101	130	147	741	1,002	125
1901.....	505	6.34	266	239	224	281	20	33	33	167	231	21
1902.....	535	6.73	290	245	230	305	27	29	26	194	243	16
1903.....	617	7.14	347	270	271	346	24	39	39	199	287	29
Total, 38 years...	7,706	3.59	4,056	3,650	3,863	3,843	354	419	602	2,261	3,694	376

*Exclusive of Providence city

DISEASES OF THE LIVER.

There were 120 deaths reported, in 1903, as having been caused by structural diseases of the liver.

This number represents 1.39 per cent. of all causes, and a proportion of .26 to every 1,000 of the population.

Of the 120 decedents, there were 79 males and 41 females.

There were 37 of native parentage and 83 of foreign.

Ninety-eight of the whole number were of persons of 40 years of age and over.

In the age period of from 5 to 40, there were but 22 decedents from diseases of the liver.

The mortality from such diseases does not depend to any marked extent upon the influence of season.

Table LXXXII will present various facts relating to diseases of the liver during thirty-eight years.

TABLE LXXXII.

Mortality from Diseases of the Liver, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.		SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
	Per cent.		Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1866-1870.....	201	1.31	113	88	118	83	12	14	36	47	70	22
1871-1875.....	202	.98	91	111	119	83	18	14	12	56	88	14
1876.....	45	1.09	26	19	27	18	1	5	5	11	18	5
1877.....	52	1.17	23	29	31	21	1	.....	7	16	24	4
1878.....	49	1.10	25	24	32	17	8	1	6	14	18	2
1879.....	52	1.24	27	25	31	21	4	4	2	14	22	6
1880.....	58	1.27	29	29	40	18	4	3	8	15	25	3
1876-1880.....	256	1.15	130	126	161	95	18	13	28	70	107	20
1881.....	46	.92	30	16	21	25	2	2	6	8	24	4
1882.....	62	1.22	34	28	36	26	3	5	10	17	24	3
1883.....	51	.94	27	24	20	31	5	6	4	16	18	2
1884.....	48	.93	22	26	23	25	5	3	5	2	31	2
1885.....	61	1.13	24	37	32	29	2	6	6	21	24	2
1881-1885.....	268	1.03	137	131	132	136	17	22	31	64	121	13
1886.....	54	.92	29	25	26	28	4	4	4	14	28	.....
1887.....	86	1.35	40	46	38	48	3	5	3	31	39	5
1888.....	68	1.03	38	30	36	32	1	5	6	28	26	2
1889.....	70	1.12	30	40	31	39	1	2	10	26	29	2
1890.....	65	.94	42	23	29	36	3	4	6	21	26	5
1886-1890.....	343	1.07	179	164	160	183	12	20	29	120	148	14
1891.....	81	1.23	41	40	28	53	3	4	9	26	38	1
1892.....	89	1.20	39	50	34	55	3	5	4	27	45	5
1893.....	72	.97	43	29	30	42	4	8	6	15	36	3
1894.....	93	1.30	43	50	42	51	2	9	9	42	24	7
1895.....	81	1.07	43	38	28	53	.....	6	10	27	31	7
1891-1895.....	416	1.15	209	207	162	254	12	32	38	137	174	23
1896.....	110	1.47	56	54	37	73	3	7	6	40	48	6
1897.....	58	.82	31	27	22	36	4	3	6	15	25	5
1898.....	91	1.32	41	50	31	60	3	7	6	26	41	8
1899.....	92	1.23	48	44	22	70	5	6	15	25	35	6
1900.....	100	1.13	56	44	36	64	.....	10	7	29	47	7
1896-1900.....	451	1.19	232	219	148	303	15	33	40	135	196	32
1901.....	100	1.26	54	46	31	69	3	8	7	31	46	5
1902.....	112	1.41	54	58	54	58	2	3	7	41	50	9
1903.....	120	1.39	79	41	37	83	2	8	11	33	56	10
Total, 38 years...	2,469	1.15	1,278	1,191	1,122	1,347	111	167	239	734	1,056	162

* Exclusive of Providence city.

DROPSY.

During the years 1899, 1900, 1901, 1902, and 1903, there were no deaths from dropsy, so called, all cases so reported having been ascertained to have been the result of some definite cause, and placed in that division.

The continuance of this table has been discontinued, but is here inserted that the changes and advance in perfection of diagnosis may be demonstrated.

TABLE LXXXIII.

Mortality from Kidney and Liver Diseases compared with Dropsy (so returned), for thirty-eight years, 1866 to 1903.

YEARS.	DEATHS FROM KIDNEY DISEASES.			DEATHS FROM LIVER DISEASES.			TOTAL DEATHS FROM KIDNEY AND LIVER DISEASES.			DEATHS FROM DROPSY.			Diminution of Dropsy in reference to Kidney and Liver Diseases.	Percentage of Dropsy to all.
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.		
1866-1870....	135	94	41	201	113	88	336	207	129	302	143	159	-34	1.96
1871-1875...	295	167	128	202	91	111	497	258	239	294	130	164	-203	1.43
1876.....	50	22	28	45	26	19	95	48	47	70	35	35	-25	1.70
1877.....	67	40	27	52	23	29	119	63	56	64	25	39	-55	1.44
1878.....	80	50	30	49	25	24	129	75	54	44	23	21	-85	.99
1879.....	79	51	28	52	27	25	131	78	53	54	28	26	-77	1.21
1880.....	91	52	39	58	29	29	149	81	68	46	22	24	-103	.95
1876-1880....	367	215	152	256	130	126	623	345	278	278	133	145	-345	1.25
1881.....	79	40	39	46	30	16	125	70	55	48	23	25	-77	.96
1882.....	86	50	36	62	34	28	148	84	64	52	23	29	-96	1.02
1883.....	129	72	57	51	27	24	180	99	81	47	21	26	-133	.89
1884.....	118	53	65	48	22	26	166	75	91	40	20	20	-126	.78
1885.....	159	92	67	61	24	37	220	116	104	44	30	14	-176	.82
1881-1885.....	571	307	264	268	137	131	839	444	395	231	117	114	-608	.89
1886.....	155	85	70	54	29	25	209	114	95	45	18	27	-164	.77
1887.....	169	92	77	86	40	46	255	132	123	35	14	21	-220	.55
1888.....	213	102	111	68	38	30	281	140	141	47	18	29	-234	.71
1889.....	210	119	91	70	30	40	280	149	131	42	14	28	-238	.67
1890.....	229	116	113	65	42	23	294	158	136	44	18	26	-250	.63
1886-1890.....	976	514	462	343	179	164	1,319	693	626	213	82	131	-1106	.67
1891.....	245	123	122	81	41	40	326	164	162	35	8	27	-291	.52
1892.....	258	135	123	89	39	50	347	174	173	39	17	22	-308	.53
1893.....	302	154	148	72	43	29	374	197	177	39	11	28	-335	.52
1894.....	313	152	161	93	43	50	406	195	211	7	3	4	-399	.10
1895.....	341	176	165	81	43	38	422	219	203	4	1	3	-418	.05
1891-1895.....	1,459	740	719	416	209	207	1,875	949	926	124	40	84	-1751	.34
1896.....	395	209	186	110	56	54	505	265	240	2	1	1	-503	.03
1897.....	387	198	189	58	31	27	445	229	216	2	1	1	-443	.03
1898.....	471	228	243	91	41	50	562	269	293	3	1	2	-559	.04
1899.....	477	241	236	92	48	44	569	289	280	.....	.....	.....	-569	.....
1900.....	516	240	276	100	56	44	616	296	320	.....	.....	.....	-616	.....
1896-1900.....	2,246	1,116	1,130	451	232	219	2,697	1,348	1,349	7	3	4	-2690	.02
1901.....	505	266	239	100	54	46	605	320	285	.....	.....	.....	-605	.....
1902.....	535	290	245	112	54	58	647	344	303	.....	.....	.....	-647	.....
1903.....	617	347	270	120	79	41	737	426	311	.....	.....	.....	-737	.....
Total, 38 years	7,706	4,056	3,650	2,469	1,278	1,191	10,175	5,334	4,841	1,449	648	801	-8726	.70

MEASLES.

There were 133 decedents from measles as a cause of death in 1903, as against 25 in 1902.

This number represents 1.54 per cent. of all causes, and a proportion of .06 to every 1,000 of the population.

Of the 133, there were 68 males and 65 females.

Of parentage there were 41 of native and 92 of foreign.

During the last ten years the proportion of mortality from measles has been about 49 of native to every 100 of foreign parentage.

During 1903 the number of decedents under 5 years of age was 115.

The number in the different divisions of the State may be found in Table LXXXIV.

TABLE LXXXIV.

Mortality in the State from Measles, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females. *	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	92	.60	44	48	26	66	6	4	12	35	25	....
5 years, 1871-1875	102	.50	43	59	53	49	5	12	7	39	35	4
1876.....	4	.10	....	4	1	3	....	....	....	4	....	....
1877.....	11	.25	3	8	2	9	....	....	1	8	2	....
1878.....	81	1.82	39	42	25	56	2	3	....	26	50	....
1879.....	....	....	....	....	....	....	....	....	....	....	....	....
1880.....	9	.20	3	6	2	7	....	....	....	6	3	....
1876-1880.....	105	.47	45	60	30	75	2	3	1	44	55	....
1881.....	37	.74	17	20	15	22	....	1	2	9	25	....
1882.....	6	.12	1	5	....	6	....	....	....	2	4	....
1883.....	14	.27	11	3	9	5	....	1	....	3	8	2
1884.....	18	.35	10	8	5	13	1	6	1	3	7	....
1885.....	45	.84	27	18	19	26	....	7	2	27	8	1
1881-1885.....	120	.46	66	54	48	72	1	15	5	44	52	3
1886.....	18	.30	11	7	4	14	....	5	....	4	9	....
1887.....	132	2.08	69	63	57	75	....	5	8	26	90	3
1888.....	11	.22	5	6	3	8	....	2	....	7	2	....
1889.....	29	.47	15	14	10	19	....	8	....	7	14	....
1890.....	92	1.32	45	47	42	50	2	10	....	41	31	8
1886-1890.....	282	.88	145	137	116	166	2	30	8	85	146	11
1891.....	12	.18	7	5	4	8	1	2	2	3	3	1
1892.....	28	.38	14	14	10	18	....	2	4	11	11	....
1893.....	100	1.34	56	44	33	67	....	11	....	22	64	3
1894.....	9	.12	4	5	3	6	....	....	2	2	5	....
1895.....	53	.70	24	29	11	42	....	5	....	8	40	....
1891-1895.....	202	.54	105	97	61	141	1	20	8	46	123	4
1896.....	58	.77	28	30	22	36	....	6	3	28	19	2
1897.....	33	.46	21	12	11	22	5	1	1	8	18	....
1898.....	18	.26	11	7	3	15	....	....	1	12	4	1
1899.....	47	.63	22	25	12	35	....	5	....	13	27	2
1900.....	185	.210	87	98	79	106	4	25	....	48	99	9
1896-1900.....	341	.90	169	172	127	214	9	37	5	109	167	14
1901.....	15	.19	10	5	3	12	....	1	....	10	3	1
1902.....	25	.31	17	8	5	20	1	....	1	16	7	....
1903.....	133	1.54	68	65	41	92	2	15	1	17	93	5
Total, 38 years...	1,417	.66	712	705	510	907	29	137	48	445	716	42

* Exclusive of Providence city.

OLD AGE.

The number of deaths, in 1903, attributed to old age as a cause, was 231. This is 30 less than in 1902.

This number represents 2.67 per cent. of all causes, and a proportion of .50 to every 1,000 of the population.

Of the 231 decedents from old age, 98 were males and 133 were females, or about 73 males to every 100 females.

Of the parentage of the 231, there were 131 of native and 100 of foreign parentage.

The following Table will present the statistics of deaths in Rhode Island from old age for thirty-eight years:

TABLE LXXXV.

Mortality in the State from Old Age, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	998	6.48	366	632	764	284	55	102	157	233	267	134
1871-1875.....	1,158	5.64	467	691	833	325	61	103	161	332	348	153
1876.....	241	6.18	107	134	177	64	12	14	38	65	71	41
1877.....	213	5.00	96	117	145	68	12	23	29	57	63	29
1878.....	222	5.25	84	138	172	50	15	8	32	76	61	30
1879.....	220	5.22	82	138	152	68	14	19	26	69	67	25
1880.....	273	5.95	121	152	186	87	12	20	34	90	73	44
1876-1880.....	1,169	5.24	490	679	832	337	65	84	159	357	335	169
1881.....	247	5.29	101	146	167	80	12	24	36	93	72	10
1882.....	283	5.89	110	173	190	93	20	25	40	106	79	13
1883.....	275	5.22	105	170	184	91	17	18	44	91	84	21
1884.....	293	5.68	101	192	196	97	16	20	39	106	86	26
1885.....	267	4.95	86	181	183	84	9	32	47	87	70	22
1881-1885.....	1,365	5.27	503	862	920	445	74	119	206	483	391	92
1886.....	276	4.69	101	175	181	95	16	24	36	100	73	27
1887.....	278	4.38	103	175	167	111	17	19	29	109	76	28
1888.....	290	4.35	108	182	198	92	16	26	25	124	64	35
1889.....	227	3.63	75	152	136	91	10	23	23	73	71	27
1890.....	198	2.87	72	126	123	75	16	19	19	59	63	22
1886-1890.....	1,269	3.97	459	810	805	464	75	111	132	465	347	139
1891.....	185	2.80	83	102	121	64	18	16	26	65	41	19
1892.....	256	3.46	95	161	168	88	9	24	29	91	71	32
1893.....	183	2.44	72	111	113	70	8	16	19	33	92	15
1894.....	187	2.61	60	127	109	78	12	21	23	64	51	16
1895.....	197	2.61	82	115	105	92	17	17	16	87	51	9
1891-1895.....	1,008	2.78	392	616	616	392	64	94	113	340	306	91
1896.....	206	2.74	84	122	112	94	8	23	13	89	57	16
1897.....	159	2.24	51	108	96	63	7	9	6	69	57	11
1898.....	205	2.97	86	119	135	70	9	11	30	79	56	20
1899.....	228	3.06	85	143	148	80	10	16	37	71	72	22
1900.....	250	2.83	96	154	150	100	15	34	42	72	65	22
1896-1900.....	1,048	2.77	402	646	641	407	49	93	128	380	307	91
1901.....	234	2.94	83	151	147	87	13	18	33	72	76	22
1902.....	261	3.28	100	161	148	113	9	25	42	94	78	13
1903.....	231	2.67	98	133	131	100	14	21	36	92	51	17
Total, 38 years...	8,741	4.07	3,360	5,381	5,837	2,904	479	770	1,167	2,898	2,506	921

*Exclusive of Providence city.

PERITONITIS.

There were 24 deaths which were caused by peritonitis during 1903.

This number represents .28 per cent. of all causes, and a proportion of .05 to every 1,000 of the population.

Sex.—Of the 24 decedents from peritonitis, there were 9 males and 15 females.

Parentage.—There were 6 of native parentage and 18 of foreign.

PNEUMONIA.

There were 870 decedents from pneumonia in 1903. The number is 155 larger than in 1902.

This number represents 10.1 per cent. of all causes, and a proportion of 1.9 to every 1,000 of the population.

Sex.—Of the 870 deaths from pneumonia, 425 were males and 445 were females, or about 105 females to every 100 males.

Parentage.—By parentage, there were 301 of native and 569 of foreign parentage. The proportion of decedents from pneumonia was about 53 of native to each 100 of foreign parentage.

Season.—There were 450, or over 50 per cent., of the deaths that occurred during the first four months of the year. The largest mortality, by months, was 131 in February, 120 in January, 118 in March, and 105 in December.

Pneumonia, as a cause of death, has increased in the ratio to whole number of deaths, during the last thirty-eight years, from an average of 6.3 per cent. during the first ten years to an average of 9.2 per cent. during the last ten, including 1903.

The following Table presents, for each of the last thirty-eight years, the number and the percentage, with the sex and the parentage of the decedents from pneumonia, and the number in each year, in each division of the State:

TABLE LXXXVI.

Mortality in the State from Pneumonia, 1866 to 1903, inclusive.

YEARS.	Number of Deaths. Per cent.		SEX.		PERCENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	928	6.0	467	461	556	372	43	56	66	287	407	69
1871-1875	1,331	6.5	667	664	783	584	54	71	62	385	662	97
1876	339	8.2	164	175	162	177	13	23	16	97	163	27
1877	226	5.1	104	122	127	99	10	7	14	81	98	16
1878	317	7.1	143	174	176	141	10	11	18	110	140	28
1879	311	7.4	148	163	163	148	7	15	15	103	156	15
1880	364	7.9	180	184	177	187	26	16	18	92	192	20
1876-1880	1,557	7.0	739	818	805	752	66	72	81	483	749	106
1881	327	6.5	177	150	190	137	10	23	17	81	174	22
1882	314	7.2	178	166	163	181	10	22	24	61	176	21
1883	400	7.8	192	208	198	202	19	21	34	108	204	14
1884	363	7.1	167	196	192	171	10	13	17	125	172	26
1885	465	8.6	214	251	271	194	15	20	33	151	227	19
1881-1885	1,899	7.3	928	971	1,014	885	64	99	125	556	953	102
1886	481	8.2	232	249	234	247	17	29	37	161	209	28
1887	488	7.7	260	228	227	261	13	27	39	142	227	40
1888	508	7.7	274	234	227	281	16	37	29	171	219	36
1889	483	7.7	255	228	213	270	18	37	29	169	208	22
1890	569	8.2	288	281	247	322	16	36	30	206	246	35
1886-1890	2,529	7.9	1,309	1,220	1,148	1,381	80	166	164	849	1,109	161
1891	568	8.5	270	298	247	321	17	40	70	183	232	26
1892	655	8.8	335	320	265	390	18	57	52	216	277	35
1893	776	10.4	412	364	319	457	18	42	49	232	392	43
1894	665	9.3	344	321	305	360	18	47	46	224	276	54
1895	685	9.1	340	345	289	396	28	49	25	243	292	48
1891-1895	3,349	9.2	1,701	1,648	1,425	1,924	99	235	242	1,098	1,469	206
1896	669	8.9	366	303	274	395	23	45	39	263	256	43
1897	635	8.9	337	298	268	367	25	33	36	254	251	36
1898	542	7.8	299	243	218	324	8	39	41	198	241	15
1899	686	9.2	357	329	317	369	12	66	62	204	314	28
1900	966	10.9	479	487	373	593	25	90	43	323	451	34
1896-1900	3,498	9.3	1,838	1,660	1,450	2,048	93	273	221	1,242	1,513	156
1901	742	9.3	400	342	324	418	24	69	46	262	293	48
1902	715	9.0	378	337	279	436	23	45	45	248	324	30
1903	870	10.1	425	445	301	569	19	45	47	303	414	42
Total, 38 years...	17,418	8.1	8,852	8,566	8,085	9,333	565	1,131	1,099	5,713	7,893	1,017

*Exclusive of Providence city.

TABLE LXXXVII.

Exhibiting the Number of Decedents from Pneumonia, in each of the several Periods of Life, during each of the last thirty-eight years, from 1866 to 1903, inclusive.

YEARS.	PERIODS OF LIFE.										
	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over. Not stated.
1866.....	57	4	4	5	12	10	14	21	25	32	9
1867.....	57	9	2	3	10	11	13	16	25	13	12 1
1868.....	70	4	3	3	15	8	16	18	19	27	13
1869.....	64	11	1	2	11	12	9	28	25	16	11
1870.....	84	6	5	4	6	7	8	14	20	19	8 1
1871.....	71	7	2	7	10	17	16	16	35	17	19 1
1872.....	83	5	1	7	17	20	19	22	24	19	11 1
1873.....	105	4	8	3	10	14	16	17	24	23	10
1874.....	76	9	4	6	17	17	25	21	40	27	8
1875.....	120	9	3	8	22	30	35	39	61	43	28 2
1876.....	116	5	4	3	20	20	32	35	48	39	17
1877.....	79	2	.....	7	15	15	24	27	22	24	9 2
1878.....	115	9	4	10	14	17	28	20	42	45	13
1879.....	102	8	1	3	14	27	26	35	38	38	19
1880.....	95	18	3	16	14	33	37	46	47	43	12
1881.....	102	4	2	5	15	22	26	45	48	31	26 1
1882.....	71	3	4	14	22	36	49	33	41	46	21 4
1883.....	88	15	2	13	32	33	40	53	49	46	27 2
1884.....	103	14	5	11	23	34	24	32	53	37	23 4
1885.....	121	9	10	8	23	29	50	49	76	59	29 2
1886.....	111	10	7	19	32	35	50	58	74	55	30
1887.....	132	15	7	7	32	43	51	56	64	53	28
1888.....	103	20	5	15	49	48	61	62	70	54	21
1889.....	120	14	3	20	27	36	51	57	77	47	31
1890.....	161	7	10	12	46	55	55	55	79	54	33 2
1891.....	126	10	4	11	42	54	60	70	84	70	37
1892.....	139	10	9	10	39	69	75	74	110	71	44 5
1893.....	176	25	8	17	49	68	96	115	102	70	50
1894.....	169	19	9	18	47	56	67	72	78	77	52 1
1895.....	172	16	9	20	49	56	77	66	94	77	49
1896.....	220	20	7	17	33	55	56	71	83	66	40 1
1897.....	194	14	10	17	33	46	58	58	73	75	57
1898.....	202	11	4	9	23	39	40	58	66	54	36
1899.....	238	14	6	19	38	53	50	62	78	74	53 1
1900.....	338	24	7	21	53	77	86	105	109	90	54 2
1901.....	185	20	5	21	49	57	91	94	93	77	49 1
1902.....	285	16	8	20	35	42	51	67	75	84	31 1
1903.....	338	23	5	15	41	72	70	77	99	84	43 3
Total, 38 years...	5,188	443	191	426	1,039	1,373	1,652	1,859	2,270	1,876	1,063 38

Age.—Of the decedents from pneumonia, during the period of thirty-eight years, 30 per cent. were under five years of age. Of over fifty years of age the number of decedents was 41 per cent. of the whole number. The following summary will present the percentages for 1903 in round numbers:

Under five years of age.....	30 per cent.
Five years and under twenty, and not stated.....	6 per cent.
Twenty years and under fifty.....	23 per cent.
Fifty years and over	41 per cent.

SCARLET FEVER.

The number of deaths returned as having been caused by scarlet fever, in 1903, was 60. The number is double that of 1902.

This number represents .7 per cent. of all causes, and a proportion of .13 to every 1,000 of the population.

Sex.—Of the 60 decedents from scarlet fever, 34 were males and 26 were females.

Parentage.—There were 23 of native parentage and 37 of foreign.

The following Table will present the statistics of scarlet fever for the last forty-eight years, from 1856 to 1903, inclusive, the number and percentage and sex of the decedents from scarlet fever, and the number from scarlet fever in each division of the State. It also shows, from 1866 to 1903, inclusive, the parentage of the decedents from scarlet fever:

TABLE LXXXVIII.

Mortality in the State from Scarlet Fever, 1856 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
10 yrs., 1856-1865	1,440	5.2	700	740	†	†	57	79	191	414	634	65
1866-1870.....	496	3.2	231	265	210	286	26	32	27	142	236	33
1871-1875.....	1,053	5.1	503	550	513	540	40	53	51	302	584	73
1876.....	80	1.9	34	46	42	38	3	2	7	21	35	12
1877.....	62	1.4	26	36	29	33	14	4	3	21	12	8
1878.....	86	1.9	41	45	35	51	3	5	3	14	57	4
1879.....	311	7.4	164	147	130	181	3	6	4	37	255	6
1880.....	468	10.0	215	253	216	252	22	30	11	143	243	19
1876-1880.....	1,007	4.5	480	527	452	555	45	47	28	236	602	49
1881.....	138	3.0	79	59	62	76	11	25	12	41	45	4
1882.....	45	0.9	24	21	16	29	.....	3	16	7	18	1
1883.....	34	0.6	17	17	14	20	1	1	5	9	16	2
1884.....	94	1.8	39	58	41	56	.....	.....	8	28	57	4
1885.....	91	1.7	36	55	48	43	.....	3	6	24	38	20
1881-1885.....	405	1.6	195	210	181	224	12	32	47	109	174	31
1886.....	88	1.5	46	42	29	59	.....	13	2	41	30	2
1887.....	266	4.2	120	146	95	171	9	16	4	80	154	3
1888.....	207	3.1	101	106	91	116	1	29	10	87	80	.....
1889.....	51	0.8	24	27	14	37	3	2	6	14	25	1
1890.....	16	0.2	11	5	6	10	.....	3	.....	2	8	3
1886-1890.....	628	2.0	302	326	235	393	13	63	22	224	297	9
1891.....	33	0.5	17	16	12	21	1	3	.....	9	17	3
1892.....	67	0.9	38	29	21	46	1	4	4	20	38	.....
1893.....	193	2.6	86	107	75	118	1	23	3	68	97	1
1894.....	123	1.7	59	64	52	71	2	8	2	55	56	.....
1895.....	107	1.4	52	55	42	65	1	2	3	37	63	1
1891-1895.....	523	1.4	252	271	202	321	6	40	12	189	271	5
1896.....	53	0.7	30	23	24	29	.....	2	1	9	33	8
1897.....	29	0.4	15	14	13	16	1	1	4	10	12	1
1898.....	21	0.3	10	11	14	7	.....	1	1	13	4	2
1899.....	29	0.4	17	12	13	16	.....	3	.....	6	19	1
1900.....	34	0.3	24	10	22	12	.....	1	6	16	11	.....
1896-1900.....	166	0.4	96	70	86	80	1	8	12	54	79	12
1901.....	21	0.3	10	11	9	12	.....	2	2	8	9	.....
1902.....	30	0.4	16	14	10	20	.....	6	6	9	9	.....
1903.....	60	0.7	34	26	23	37	6	6	2	22	24	.....
Total, 48 years...	5,829	2.8	2,819	3,010	1,921	2,468	206	368	400	1,709	2,869	277

*Not including Providence city.

†Records incomplete.

CROUP, DIPHTHERIA, AND SCARLET FEVER.

Season and Mortality.

The following Table is continued, to show by comparison the influence of season in regard to the mortality from croup and scarlet fever for fifty-one years, and diphtheria for forty-six years. The Table will give the average monthly and quarterly percentages of deaths from each cause:

TABLE LXXXIX.

MONTHS.	CROUP. — 1853-1903.		DIPHTHERIA. — 1858-1903.		SCARLET FEVER. — 1853-1903.	
	Number of deaths.	Per cent.	Number of deaths.	Per cent.	Number of deaths.	Per cent.
January.....	407	12.59	659	10.02	789	12.10
February.....	362	11.20	485	7.37	724	11.10
March.....	296	9.16	512	7.78	646	9.90
First Quarter...	1,065	32.95	1,656	25.17	2,159	33.10
April.....	241	7.46	454	6.90	566	8.68
May.....	170	5.26	448	6.81	593	9.09
June.....	143	4.42	384	5.84	508	7.79
Second Quarter.	554	17.14	1,286	19.55	1,667	25.56
July.....	110	3.40	365	5.55	372	5.70
August.....	90	2.79	379	5.76	311	4.77
September.....	187	5.79	487	7.40	324	4.97
Third Quarter..	387	11.98	1,231	18.71	1,007	15.44
October.....	334	10.33	799	12.14	450	6.90
November.....	452	13.99	855	12.99	541	8.30
December.....	440	13.61	753	11.44	698	10.70
Fourth Quarter.	1,226	37.93	2,407	36.57	1,689	25.90
Totals.....	3,232	100.00	6,580	100.00	6,522	100.00

SUICIDE.

The number of deaths by suicide, in Rhode Island, during 1903, was 55, which is one more than in the preceding year.

There were 43 male and 12 female decedents from that cause.

Of the 55, 22 were of native parentage and 33 of foreign.

The means of self-destruction, according to the returns, were as follows:

By cutting throat, 1; by drowning, 5; by hanging, 9; by illuminating gas, 12; by chloroform, 1; by jumping from high building, 1; by shooting, 10; by arsenic, 2; by carbolic acid, 4; by corrosive sublimate, 1; by cyanide potassium, 1; by opium, 3; by "paris green," 3; by strychnine, 1; by unknown poison, 1.

TABLE XC.

Mortality in the State from Suicide, 1866 to 1903, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870.	86	.56	67	19	66	20	2	7	6	31	34	6
1871-1875.....	89	.43	61	28	57	32	3	9	6	20	43	8
1876.....	18	.46	15	3	6	12	.....	.....	1	5	10	2
1877.....	22	.52	16	6	15	7	.....	2	1	5	12	2
1878.....	21	.50	16	5	12	9	3	2	.....	5	7	4
1879.....	13	.31	10	3	5	8	.....	.....	.....	5	7	1
1880.....	10	.20	5	5	8	2	.....	1	1	6	2	.....
1876-1880.....	84	.38	62	22	46	38	3	5	3	26	38	9
1881.....	23	.49	19	4	15	8	.....	5	3	.....	14	1
1882.....	31	.64	23	8	23	8	1	4	3	8	12	3
1883.....	25	.47	18	7	11	14	.....	.....	2	8	15	.....
1884.....	22	.43	20	2	13	9	.....	1	1	6	11	3
1885.....	20	.37	16	4	11	9	1	1	6	3	6	3
1881-1885.....	121	.47	96	25	73	48	2	11	15	25	58	10
1886.....	17	.29	16	1	12	5	1	3	2	4	7	.....
1887.....	16	.25	13	3	8	8	2	.....	2	5	7	.....
1888.....	21	.42	20	1	15	6	.....	1	3	6	9	2
1889.....	24	.38	20	4	9	15	.....	2	5	7	10	.....
1890.....	19	.28	15	4	12	7	2	.....	1	8	5	3
1886-1890.....	97	.30	84	13	56	41	5	6	13	30	38	5
1891.....	40	.61	27	13	15	25	2	2	.....	10	24	2
1892.....	19	.26	15	4	10	9	.....	.....	4	6	8	1
1893.....	21	.38	18	3	10	11	.....	2	.....	7	12	.....
1894.....	45	.63	36	9	24	21	1	3	5	14	19	3
1895.....	31	.41	22	9	13	18	3	2	5	5	13	3
1891-1895.....	156	.46	118	38	72	84	6	9	14	42	76	9
1896.....	38	.51	28	10	20	18	2	1	2	11	20	2
1897.....	41	.58	33	8	21	20	.....	4	5	11	18	3
1898.....	46	.67	38	8	20	26	.....	3	4	14	24	1
1899.....	41	.55	30	11	18	23	1	2	1	7	27	3
1900.....	55	.62	42	13	25	30	1	2	7	24	19	2
1896-1900.....	221	.58	171	50	104	117	4	12	19	67	108	11
1901.....	55	.69	46	9	24	31	3	8	2	26	15	1
1902.....	54	.68	41	13	26	28	4	3	8	14	20	5
1903.....	55	.64	43	12	22	33	1	2	6	22	22	2
Total, 38 years...	1,018	.49	789	229	546	472	33	72	92	303	452	66

* Exclusive of Providence city.

WHOOPING COUGH.

The number of deaths from whooping cough, returned in 1903, was 164, and was 79 more than the number in 1902.

Of the 164 decedents from whooping cough, 70 were males and 94 were females.

There were 79 decedents of native parentage and 85 of foreign.

One hundred and sixty-one of the decedents were under 5 years of age.

The following Table will present the mortality from whooping cough for thirty-eight years, 1866-1903, inclusive, with the death rate, sex, parentage, etc., of the decedents:

TABLE XCI.

Mortality in the State from Whooping Cough, 1866 to 1903, inclusive.

YEARS.	Number of Deaths. Per cent.		SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1866-1870	153	.99	78	75	68	85	2	13	14	54	63	7
1871-1875.....	160	.78	65	95	64	96	4	11	13	56	73	3
1876.....	48	1.17	19	29	20	28	5	3	1	7	31	1
1877.....	32	.72	18	14	6	26	.....	.....	1	15	16	.....
1878.....	54	1.22	26	28	30	24	.....	1	.....	9	43	1
1879.....	43	.96	17	26	22	21	.....	11	1	12	15	4
1880.....	20	.41	10	10	7	13	.....	.....	2	6	11	1
1876-1880.....	197	.88	90	107	85	112	5	15	5	49	116	7
1881.....	68	1.36	33	35	30	38	.....	2	2	24	40	.....
1882.....	71	1.40	33	38	32	39	.....	4	.....	26	40	1
1883.....	9	.17	6	3	5	4	1	.....	.....	4	4	.....
1884.....	43	.83	17	26	23	20	5	.....	2	6	28	2
1885.....	42	.79	23	19	24	18	.....	1	4	9	24	4
1881-1885.....	233	.90	112	121	114	119	6	7	8	69	136	7
1886.....	49	.83	28	21	17	32	4	3	.....	18	23	1
1887.....	21	.32	9	12	10	11	.....	.....	4	6	10	1
1888.....	44	.75	17	27	16	28	.....	3	2	11	28	.....
1889.....	77	1.23	39	38	36	41	1	12	1	20	43	.....
1890.....	70	1.00	25	45	25	45	2	2	7	27	30	2
1886-1890.....	261	.82	118	143	104	157	7	20	14	82	134	4
1891.....	77	1.16	39	38	37	40	3	1	3	15	54	1
1892.....	25	.34	10	15	14	11	.....	1	3	12	9	.....
1893.....	23	.31	8	15	9	14	1	.....	4	9	7	2
1894.....	129	1.80	52	77	62	67	3	19	15	33	55	4
1895.....	45	.60	19	26	13	32	.....	8	2	7	27	1
1891-1895.....	299	.84	128	171	135	164	7	29	27	76	152	8
1896.....	59	.79	25	34	24	35	2	4	7	16	24	6
1897.....	56	.79	27	29	26	30	1	8	11	14	17	5
1898.....	96	1.39	37	59	50	46	5	2	4	24	57	4
1899.....	86	1.15	30	56	43	43	1	5	1	30	47	2
1900.....	86	.97	31	55	34	52	4	6	3	25	46	2
1896-1900.....	383	1.01	150	233	177	206	13	25	26	109	191	19
1901.....	17	.21	6	11	9	8	.....	1	1	2	13	.....
1902.....	85	1.07	28	57	41	44	2	6	16	28	30	3
1903.....	164	1.90	70	94	79	85	6	15	2	60	77	4
Total, 38 years...	1,952	.91	845	1,107	876	1,076	52	142	126	585	985	62

*Exclusive of Providence city.

TABLE XCII.

Presenting the Ratio of Mortality to the Whole Number of Specified Causes of Death, of Twenty Prominent Causes, for twenty-eight years, 1876-1903.

CAUSES OF DEATH.	YEARS.																											
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
ACCIDENTS (all kinds).....	3.40	3.10	2.89	2.43	3.51	3.04	3.44	2.84	3.80	3.09	3.22	3.25	3.01	3.46	3.60	3.54	4.18	3.58	3.29	3.92	3.96	3.71	4.30	3.71	3.82	4.37	4.01	4.37
APOPLEXY AND PARALYSIS.....	4.01	4.25	4.45	5.21	4.67	5.23	5.52	5.39	5.78	5.38	5.69	4.17	5.50	5.17	4.91	5.08	4.89	5.52	6.26	5.57	5.61	6.62	6.04	6.15	5.76	6.30	6.03	4.06
BRAIN, Dis. of....	3.64	3.68	3.28	3.73	3.44	3.84	3.60	3.50	2.97	3.61	3.11	3.29	3.43	3.03	3.13	3.36	3.33	3.49	3.11	3.45	4.00	4.63	4.75	3.59	3.30	3.55	3.39	2.37
BRONCHITIS.....	1.46	1.62	1.89	1.47	1.98	1.80	2.08	2.04	2.29	3.09	2.96	2.77	3.42	4.20	4.01	3.74	4.16	4.24	3.57	3.66	3.69	3.19	3.43	3.24	3.36	2.92	3.28	3.08
CANCER.....	2.72	3.17	2.82	2.96	2.72	3.11	2.75	3.30	3.03	3.59	2.77	2.50	2.99	3.03	2.41	2.66	2.45	2.78	3.01	3.13	3.02	3.59	4.05	3.93	3.32	3.86	4.32	4.07
CHOLERA INFAN..	6.41	6.08	3.97	3.81	5.43	5.15	6.77	4.73	6.31	5.16	6.27	5.60	7.08	6.80	8.39	8.25	8.56	8.18	6.98	6.68	7.29	6.00	6.80	6.36	6.34	5.06	7.74	7.42
TUBERCULOUS Dis. (CONSUMPTION).	16.78	15.52	15.98	15.09	14.02	15.12	15.33	15.01	14.34	14.45	14.12	11.19	12.13	11.61	12.29	11.18	10.26	9.79	9.92	11.21	11.32	10.97	12.87	13.07	11.23	12.49	11.83	11.88
CROUP.....	2.61	2.23	2.20	2.28	1.45	2.16	1.60	1.40	1.55	1.74	1.55	1.79	1.19	1.28	1.19	1.01	1.20	.68	.45	.40	.32	.24	.13	.15	.20	.30	.23	.09
DIARRHEA.....	1.87	2.11	1.25	1.26	1.52	1.65	1.87	2.55	2.20	1.55	1.59	2.09	1.20	1.40	1.37	1.26	1.73	1.59	1.17	.80	.78	.88	.87	.90	.29	.27	+1.84	+1.62

* Includes diarrhea and enteritis under 2 years.

+ Includes enteritis over 2 years.

TABLE XCIII.—BIRTHS.

Occupations of the Fathers.—1903.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Actors.....	7	Eye-glass Makers.....	1
Agents and Canvassers.....	25	Frame.....	1
Architects.....	2	Harness and Saddle.....	19
Naval.....	1	Hat.....	1
Artesian Well Sinkers.....	1	Lace.....	1
Artists.....	5	Mattress.....	1
Assayers and Analytical Chemists.....	6	Nail.....	2
Auctioneers.....	3	Paper.....	1
Baggage Masters.....	2	Pattern.....	9
Bakers.....	90	Picker.....	1
Bankers and Brokers.....	11	Rope.....	2
Bank Officers.....	3	Sail.....	2
Barbers and Hair Dressers.....	228	Shirt.....	2
Bartenders.....	88	Shoe.....	75
Baseball Players.....	1	Soap.....	1
Basket Makers.....	1	Spindle.....	3
Belt.....	8	Suspender.....	1
Bicycle.....	2	Tool.....	39
Bobbin.....	8	Wringer.....	2
Boiler.....	29	Beamers.....	1
Bolt.....	11	Bill Posters.....	3
Box.....	9	Blacksmiths.....	99
Brick.....	1	Bleachers and Fullers.....	33
Brush and Broom.....	6	Boat Builders.....	3
Butterine.....	1	Boatmen.....	1
Cabinet.....	19	Bookbinders.....	5
Cap.....	1	Bookkeepers.....	63
Carriage, and Trimmers.....	2	Bootblacks.....	13
Chandelier.....	1	Bottlers.....	8
Cigar.....	7	Braiders.....	1
Clock and Watch.....	5	Brakemen.....	38
Comb.....	1	Brewers.....	12
Core.....	10	Brick and Stone Layers.....	30
Cork.....	1	Building Movers.....	3

TABLE XCIII.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Butchers and Marketmen.....	66	Confectioners.....	12
Butlers.....	7	Contractors and Builders.....	36
Cab Drivers and Hackmen.....	4	Cooks and Caterers.....	39
Cadders.....	19	Coopers.....	10
Card Grinders.....	9	Coppersmiths.....	5
Carpenters.....	462	Cutters.....	5
Carpet Layers.....	4	Glass.....	1
Chasers.....	6	Velvet.....	1
Chimneys Builders.....	1	Decorators.....	6
Chiropodists.....	1	Dentists.....	9
Civil Engineers.....	6	Designers.....	7
Clergymen.....	19	Die Cutters.....	4
Clerks and Salesmen.....	421	Die Sinkers.....	3
Bank.....	6	Draughtsmen.....	12
Postal.....	10	Dresser-tenders.....	40
Clothiers.....	7	Drivers.....	67
Coachman.....	57	Druggists and Apothecaries.....	29
Coal and Wood Dealers.....	11	Dyers.....	54
Dry Goods.....	7	Electricians.....	62
Fish and Oyster.....	6	Electric Light Trimmers.....	8
Furniture.....	7	Elevator Men.....	6
Grain and Hay.....	7	Enamellers.....	3
Granite.....	2	Engineers.....	111
Hardware.....	4	Stationary.....	16
Ice.....	6	Engravers.....	15
Junk.....	21	Expressmen.....	23
Liquor.....	40	Farmers.....	307
Lumber.....	6	File Cutters.....	27
Milk.....	7	File Forgers.....	2
News.....	2	Finishers.....	8
Provision.....	4	Brass.....	2
Shoe.....	12	Cloth.....	7
Collectors.....	15	Fire Company Members.....	12
Commercial Travelers.....	27	Firemen.....	91
Compositors.....	5	Fishermen and Oystermen.....	36
Concreters.....	5	Florists.....	12
Conductors.....	59	Folders.....	27

TABLE XCH. —Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Foundrymen.....	7	Lithographers.....	7
Fruiterers.....	19	Locksmiths.....	2
Furriers.....	1	Longshoremen.....	22
Gardeners.....	58	Loomfixers.....	99
Gas Fitters.....	8	Lumbermen.....	1
Gate and Crossing Tenders.....	2	Machinists.....	542
Gilders.....	1	Mail Carriers.....	24
Glass Workers.....	1	Managers.....	15
Grocers.....	115	Manufacturers.....	30
Heaters.....	5	Mariners.....	3
Horse Trainers.....	1	Masons.....	95
Hostlers.....	26	Masseurs.....	4
Hotel and Inn Keepers.....	9	Mechanics.....	55
Saloon and Restaurant.....	63	Melters.....	2
Ice-men.....	4	Merchants.....	79
Inspectors.....	9	Messengers.....	1
Car.....	8	Milkmen.....	14
Cloth.....	8	Millers.....	10
Insurance Agents.....	49	Millwrights.....	4
Real Estate.....	12	Miners.....	1
Iron Rollers and Workers.....	17	Motormen.....	58
Janitors.....	16	Moulders.....	134
Jewelers.....	224	Musicians.....	18
Jobbers.....	3	Nurses.....	1
Journalists (Editors and Reporters)...	11	Officers, Army.....	4
Journey-men.....	3	Naval.....	3
Knitters.....	11	Operatives.....	648
Laborers.....	2,509	Opticians.....	4
Lamplighters.....	2	Organ Grinders.....	1
Lathers.....	6	Osteopaths.....	1
Laundrymen.....	10	Painters.....	215
Lawyers.....	26	Carriage.....	3
Leather Dressers.....	1	Paper Hangers.....	7
Life Saving Service Men.....	4	Pavers.....	1
Lighthouse Keepers.....	1	Paymasters.....	2
Linemen.....	21	Pearl Workers.....	2
Linotypers.....	3	Peddlers.....	146

TABLE XCIII.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Photographers.....	10	Secretaries.....	2
Physicians.....	42	Section-hands.....	8
Picture Framers.....	1	Sextons.....	5
Pilots.....	5	Sheriffs, Constables, and Policemen....	44
Pipe Coverers.....	1	Ship Carpenters.....	2
Plasterers and Stucco Workers.....	19	Silversmiths.....	56
Platers (Electro).....	4	Slaters.....	1
Gold.....	4	Soldiers.....	12
Nickel.....	3	Speeder Tenders.....	1
Silver.....	1	Spinners.....	106
Plumbers.....	63	Stable Keepers.....	8
Polishers.....	32	Stampers.....	2
Silver.....	6	Station Agents.....	4
Polo Players.....	2	Steam Pipers.....	46
Pork and Meat Cutters and Pork Packers.....	18	Steel Rollers and Workers.....	2
Porters.....	15	Stenographers.....	4
Pressmen.....	7	Stereotypers.....	2
Printers.....	41	Stevedores.....	2
Calico.....	2	Stewards.....	1
Promoters.....	1	Stone Cutters and Marble Workers....	59
Public Officers.....	3	Store Keepers.....	17
Publishers.....	2	Students.....	2
Pursers.....	2	Superintendents and Overseers.....	173
Quarrymen.....	7	Surveyors.....	1
Railroad Conductors.....	2	Switchmen and Gatemen.....	5
Employees.....	24	Tailors.....	97
Ranchers.....	1	Tanners and Curriers.....	2
Refiners.....	2	Taxidermists.....	1
Riding Masters.....	1	Teachers and Professors.....	21
Riggers.....	2	Music.....	3
Roll Coverers.....	4	Teamsters.....	374
Roofers.....	4	Telegraph Operators.....	12
Rubber Workers.....	117	Telephone.....	1
Sailors.....	11	Tinsmiths.....	28
U. S. N.....	17	Tobacconists.....	2
Sculptors.....	2	Traders.....	2
Sea Captains and Ship Masters.....	10	Treasurers.....	3

TABLE XCIII.—Concluded.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Twisters.....	8	Wire Workers.....	12
Undertakers.....	7	Wood Carvers.....	2
Upholsterers.....	13	Wood Choppers.....	6
Veterinary Surgeons.....	4	Wood Finishers.....	4
Waiters.....	25	Wood Sawyers.....	5
Watchmen.....	46	Wood Turners.....	12
Weavers.....	776	Wood Workers.....	6
Wheelwrights.....	6	Wool Sorters.....	24
Window Dressers.....	1		

TABLE XCIV.—MARRIAGES.

Occupations of the Grooms.—1903.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Actors.....	6	Lace Makers.....	1
Advertising Agents.....	3	Mattress.....	2
Agents and Canvassers.....	9	Nail.....	2
Army Officers.....	1	Pattern.....	5
Naval.....	3	Pencil Case.....	1
Artists.....	2	Piano.....	1
Assayers and Analytical Chemists.....	5	Rubber Stamp.....	1
Authors.....	2	Screw.....	4
Baggage Masters.....	3	Shoe.....	26
Bakers.....	43	Shuttle.....	1
Bankers and Brokers.....	14	Soap.....	1
Bank Officers.....	2	Tack.....	3
Barbers.....	51	Tool.....	29
Bartenders.....	29	Wax.....	1
Beamers.....	2	Wringer.....	7
Belt Makers.....	2	Blacksmiths.....	31
Block.....	1	Bleachers and Fullers.....	11
Bobbin.....	2	Boat Builders.....	3
Boiler.....	6	Boatmen.....	2
Box.....	12	Bookbinders.....	4
Brick.....	1	Bookkeepers.....	58
Brush.....	2	Bootblacks.....	3
Butterine.....	4	Bottlers.....	4
Cabinet.....	3	Brakemen.....	25
Cap and Hat.....	1	Brewers.....	1
Carriage, and Trimmers.....	4	Brick and Stone Layers.....	14
Cigar.....	2	Building Movers.....	1
Clock and Watch.....	3	Butchers and Marketmen.....	14
Comb.....	2	Butlers.....	3
Core.....	4	Cab Drivers and Hackmen.....	1
Frame.....	1	Calenderers.....	1
Gold Pen.....	1	Capitalists.....	1
Gum.....	1	Carders.....	25
Harness and Saddle.....	4	Card Grinders.....	5

TABLE XCIV.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Carpenters.....	112	Cutters.....	4
Carpet Layers.....	2	Corduroy.....	1
Chauffeurs.....	1	Decorators.....	5
Chasers.....	3	Dentists.....	5
Civil Engineers.....	14	Designers.....	11
Clergymen.....	6	Die Cutters and Sinkers.....	3
Clerks and Salesmen.....	319	Draughtsmen.....	13
Bank.....	2	Dresser Tenders.....	27
Postal.....	3	Drillers.....	2
Clothiers.....	1	Drivers.....	25
Coachmen.....	21	Druggists and Apothecaries.....	18
Coal and Wood Dealers.....	3	Dyers.....	28
Dry Goods.....	2	Electrical Engineers.....	3
Fish and Oyster.....	3	Electricians.....	38
Glass.....	1	Electric Light Trimmers.....	4
Grain.....	2	Elevator Men.....	3
Granite.....	1	Enamelers.....	1
Hardware.....	3	Engineers.....	42
Horse.....	1	Stationery.....	13
Ice.....	3	Engravers.....	3
Junk.....	3	Expressmen.....	3
Liquor.....	8	Farmers.....	112
Lumber.....	2	File Cutters and Grinders.....	8
Milk.....	4	File Forgers.....	1
Oil.....	1	Finishers.....	14
Provision.....	2	Brass.....	1
Shoe.....	1	Silver.....	3
Collectors.....	11	Fire Company Members.....	5
Combers.....	3	Firemen.....	38
Commercial Travelers.....	41	Fishermen and Oystermen.....	19
Compositors.....	2	Florists.....	6
Conductors, Electric Car.....	34	Folders.....	9
Confectioners.....	9	Foresters.....	1
Contractors and Builders.....	10	Foundrymen.....	17
Cooks and Caterers.....	22	Fruiterers.....	4
Coopers.....	4	Furniture Movers.....	1
Coppersmiths.....	1	Gardeners.....	29

TABLE XCIV.—Continued.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Gasfitters.....	4	Manufacturers.....	29
Gilders.....	2	Mariners.....	7
Glass Cutters and Workers.....	4	Masons.....	36
Grocers.....	27	Mechanics.....	14
Gun and Locksmiths.....	1	Melters (Gold and Silver).....	1
Horse Traders.....	3	Melters (Iron).....	1
Hostlers.....	18	Mercerizers.....	2
Hotels and Inn Keepers.....	4	Merchants.....	34
Saloon and Restaurant.....	12	Milkmen.....	3
Ice-men.....	2	Millers.....	2
Inspectors.....	11	Millwrights.....	5
Car.....	5	Motormen.....	23
Cloth.....	5	Moulders.....	43
Insurance Agents.....	20	Musicians.....	10
Real Estate.....	6	Nurses.....	4
Iron Workers.....	11	Operatives.....	179
Brass.....	1	Opticians.....	5
Steel.....	1	Organists.....	1
Janitors.....	12	Painters and Glaziers.....	84
Japanners.....	2	Painters, Carriage.....	6
Jewelers.....	128	Paper Hangers.....	4
Journalists (Editors and Reporters).....	10	Pawn Brokers.....	1
Knitters.....	4	Paymasters.....	2
Laborers.....	464	Pearl Workers.....	1
Lathers.....	2	Peddlers.....	17
Laundrymen.....	14	Photographers and Lithographers.....	7
Lawyers.....	11	Physicians.....	17
Lighthouse Keepers.....	1	Piano Tuners.....	1
Linemen.....	4	Pilots.....	2
Life Saving Service Men.....	1	Pipe Coverers.....	3
Liverymen.....	2	Plasterers and Stucco Workers.....	4
Longshoremen.....	10	Platers, Electro.....	3
Loom Fixers.....	20	Plumbers.....	33
Lumbermen.....	3	Polishers.....	13
Machinists.....	247	Polishers (Silver).....	6
Mail Carriers.....	5	Pork and Meat Cutters and Pork Packers.....	7
Managers.....	21	Porters.....	11

TABLE XCIV.—Concluded.

OCCUPATIONS.	Number.	OCCUPATIONS.	Number.
Poultrymen.....	1	Stationers.....	1
Pressmen.....	8	Steam Pipers.....	20
Printers.....	22	Stenographers.....	4
Public Officers.....	1	Stereotypers.....	2
Publishers.....	1	Stevedores.....	2
Pursers.....	1	Stewards.....	3
Quarrymen.....	6	Stone Cutters and Marble Workers....	16
Railroad Conductors.....	7	Store Keepers.....	4
Employees.....	7	Students.....	14
Engineers.....	3	Superintendents and Overseers.....	37
Refiners.....	1	Surveyors.....	3
Gold.....	1	Switchmen and Gatemen.....	6
Riggers.....	3	Tailors.....	30
Roll Coverers.....	9	Tanners and Curriers.....	1
Roofers.....	3	Teachers and Professors.....	16
Rubber Workers.....	57	Teamsters.....	132
Sailors.....	9	Telegraph Operators.....	9
U. S. Navy.....	1	Telephone Operators.....	1
Sculptors.....	1	Tinsmiths.....	9
Sea Captains and Ship Masters.....	8	Tobacconists.....	1
Seamen.....	4	Treasurers.....	2
Secretaries.....	1	Twisters.....	5
Section Hands.....	11	Undertakers.....	3
Servants.....	2	Upholsterers.....	4
Sextons.....	1	Veterinary Surgeons.....	1
Sheriffs, Constables, and Policemen..	20	Waiters.....	18
Ship Builders.....	1	Watchmen.....	5
Carpenters.....	3	Weavers.....	262
Silversmiths.....	22	Weighers.....	2
Slaters.....	1	Window Dressers.....	2
Soldiers.....	6	Wire Workers.....	9
Spinners.....	67	Wood Turners.....	6
Stable Keepers.....	3	Wood Workers.....	9
Stampers.....	3	Wool Sorters.....	12
Station Agents.....	3		

TABLE XCV.

Occupations and Ages of Decedents, from June 1, 1852, to January 1, 1904, comprising a period of fifty-one years and seven months.
Alphabetically Arranged.

(OCCUPATIONS UNDER 10, AND AGES UNDER 20, EXCLUDED.)

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.				MALES.			
Actors.....	22	797	36.22	Cabinet Makers.....	159	9,353	58.82
Agents and Canvassers.....	259	13,464	51.98	Carriage and Trimmers.....	156	9,183	58.87
Insurance.....	45	2,427	53.98	Cigar.....	121	5,646	46.66
Real Estate.....	31	1,978	63.81	Harness.....	146	7,456	51.07
Architects.....	22	1,252	56.91	Pattern.....	96	5,639	58.74
Artists.....	49	2,553	32.10	Pump and Block.....	14	788	55.71
Assayers and Analytical Chemists.....	10	600	60.00	Rope.....	25	1,672	66.88
Bakers.....	205	12,900	62.93	Sail.....	39	2,290	58.72
Bankers and Brokers.....	195	11,756	60.29	Sash and Blind.....	10	502	50.20
Bank Officers.....	77	4,955	64.35	Shoe.....	705	40,941	58.07
Barbers.....	327	11,790	36.06	Tool.....	55	2,926	53.20
Bartenders.....	68	2,418	35.56	Watch and Clock.....	48	2,741	57.10
Belt Makers.....	19	976	51.37	Blacksmiths and Farriers.....	838	46,119	55.03
Boiler.....	96	4,127	42.99	Bleachers and Fullers.....	84	4,208	50.10
Box.....	27	1,349	49.96	Boatmen.....	35	1,914	54.69
Broom and Brush.....	18	905	50.28	Boat Builders.....	35	2,210	63.14

TABLE XCV.—Continued.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.				MALES.			
Bookbinders.....	29	1,350	46.55	Fish and Oyster Dealers.....	35	2,108	60.23
Bookkeepers.....	507	23,427	46.21	Junk.....	19	1,079	56.79
Bottlers.....	12	448	37.33	Liquor.....	147	6,848	46.50
Brakemen.....	167	5,015	30.03	Lumber.....	24	1,397	58.21
Brewers.....	27	1,298	48.07	Provision.....	30	1,741	58.03
Brick and Stone Layers.....	20	912	45.60	Shoe.....	14	757	54.07
Butchers and Marketmen.....	355	18,443	51.96	Collectors.....	12	622	51.83
Calico Printers.....	60	3,313	55.22	Commercial Travelers.....	46	2,166	47.09
Calkers.....	16	1,114	39.62	Compositors.....	10	489	48.90
Car Conductors and Motormen.....	90	3,678	40.87	Confectioners.....	59	2,717	46.05
Cards.....	23	1,274	55.37	Contractors and Builders.....	155	9,294	59.96
Carpenters and Joiners.....	2,621	148,919	56.82	Cooks and Caterers.....	162	7,939	49.01
Chasers.....	22	894	40.64	Coopers.....	139	9,198	66.17
Civil Engineers.....	59	2,958	50.14	Coppersmiths.....	16	696	60.56
Clerks and Salesmen.....	1,679	63,743	37.96	Decorators.....	15	579	38.60
Clergymen.....	303	19,336	63.81	Dentists.....	63	3,332	52.88
Clothiers.....	18	991	55.05	Designers.....	28	1,468	52.43
Coachmen.....	227	10,228	45.06	Die Sinkers.....	29	1,448	49.93
Coal and Wood Dealers.....	25	1,456	58.24	Draughtsmen.....	21	716	34.10

TABLE XCIV.—Continued.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.							
Drivers, Cab, Hack, etc.....	147	5,925	40.30	Gilders.....	12	535	44.58
Druggists and Apothecaries.....	150	10,035	66.90	Grocers.....	545	29,818	54.71
Dyers.....	173	8,926	51.60	Gun and Locksmiths.....	28	1,525	54.46
Electricians.....	34	1,230	36.18	Hatters.....	28	1,538	54.93
Enamellers.....	10	523	52.30	Hostlers.....	188	8,128	43.23
Engineers and Firemen.....	589	29,629	50.30	Hotel and Inn Keepers.....	194	10,732	55.32
Engravers.....	163	8,037	49.43	Saloon and Restaurant.....	232	10,716	46.19
Expressmen.....	122	6,133	50.27	Stable.....	90	4,918	55.76
Farmers.....	7,684	515,811	67.15	Store.....	86	4,712	54.79
Finishers.....	37	1,871	50.57	Inspectors.....	29	1,440	49.66
File Cutters.....	112	4,679	41.78	Inventors.....	16	1,054	65.87
Nail.....	12	490	40.83	Iron Rollers and Workers.....	21	1,006	47.90
Fire Company Members.....	14	670	47.86	Janitors.....	141	7,808	55.37
Fishermen and Oystermen.....	319	17,267	54.13	Jewelers.....	1,381	59,069	42.77
Florists.....	69	3,816	55.30	Journalists (Editors & Reporters).....	57	2,671	46.86
Founders.....	48	2,418	51.00	Judges and Justices.....	19	1,225	64.47
Fruiters.....	12	574	47.83	Laborers.....	12,460	615,378	49.39
Gardeners.....	405	23,972	59.19	Lamplighters.....	22	1,192	54.18
Gas Fitters.....	65	2,830	43.54	Lapidaries.....	13	494	38.00

TABLE XCV.—Continued.

OCCUPATIONS.	Total Mortality	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.				MALES.			
Lathers.....	10	412	41.20	Naval Officers.....	22	1,052	47.82
Laundrymen.....	32	1,341	41.91	Nurses.....	20	1,047	52.35
Lawyers.....	226	13,049	57.74	Operatives.....	2,966	131,209	44.24
Longshoremen.....	12	488	40.67	Painters and Glaziers.....	1,297	64,006	49.35
Loomfixers.....	24	1,117	46.54	Paperhangers.....	26	1,336	51.38
Machinists.....	1,997	97,815	48.99	Peddlers.....	232	11,609	50.04
Mail Carriers.....	25	1,126	45.04	Photographers and Lithographers	34	1,599	47.03
Manufacturers.....	755	46,241	61.25	Physicians.....	380	22,594	59.46
Mariners.....	530	26,436	49.88	Pilots.....	31	1,788	57.08
Masons.....	1,086	61,605	56.73	Plasterers and Stucco Workers.....	69	3,332	48.29
Mechanics.....	543	28,755	52.96	Platers.....	16	882	55.13
Melters.....	13	739	56.85	Plumbers.....	147	5,850	39.80
Merchants.....	1,516	87,888	57.97	Polishers.....	59	2,675	45.34
Milkmen.....	28	1,104	39.43	Pork and Meat Cutters and Packers	27	1,203	44.56
Millers.....	56	3,300	58.93	Porters.....	59	2,753	46.66
Millwrights.....	42	2,867	68.26	Printers.....	245	13,648	56.16
Miners.....	20	1,170	58.50	Public Officers.....	111	6,702	60.38
Moulders.....	423	23,027	54.44	Railroad Officials.....	13	735	56.54
Musicians.....	97	4,526	46.66	Refiners.....	19	864	45.47

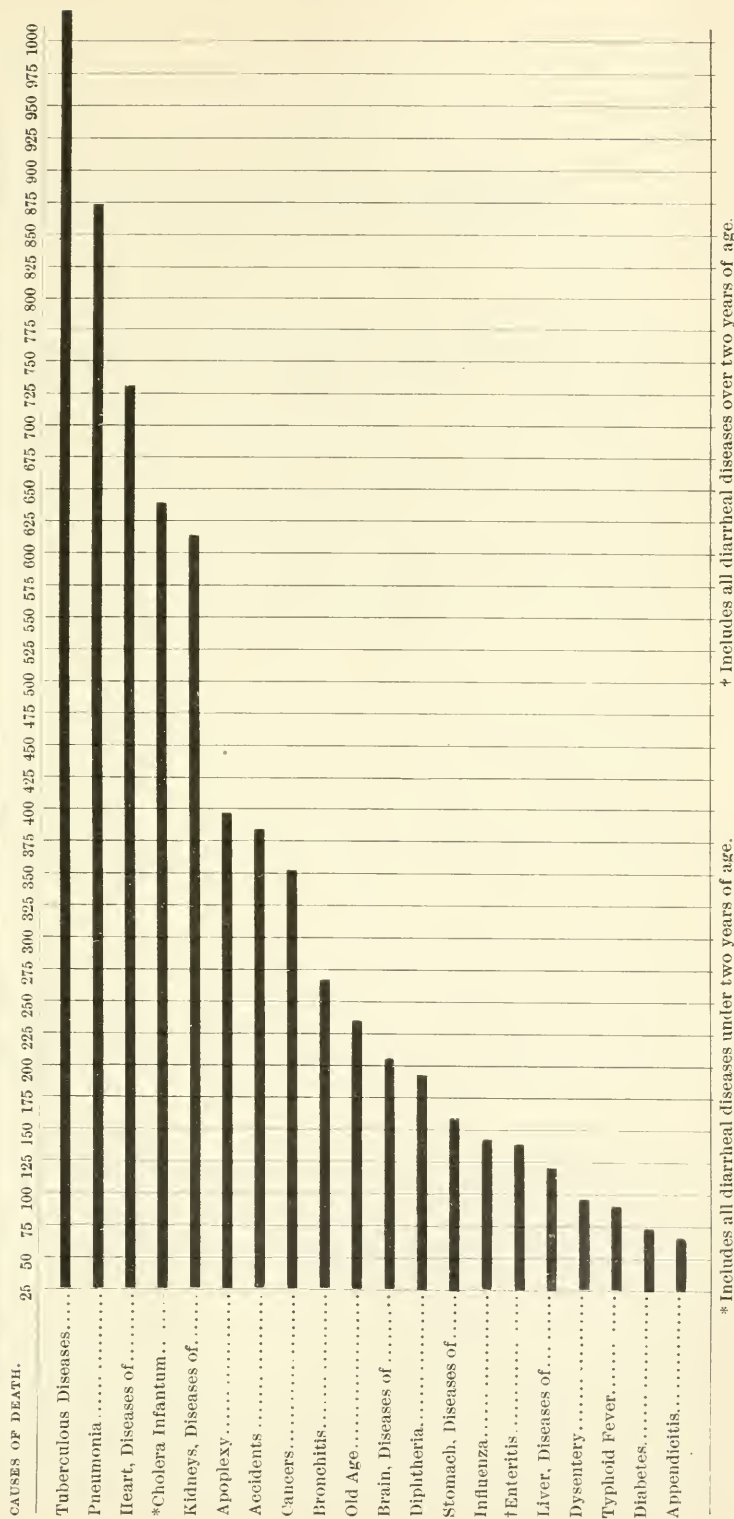
TABLE XCV.—Continued.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.							
Riggers.....	25	1,343	53.72	Switchmen, Gatemen, etc.....	34	1,878	55.24
Roll Covers.....	36	2,099	58.31	Tailors.....	500	27,808	55.74
Rubber Workers.....	236	9,997	42.36	Tanners and Curriers.....	65	4,140	63.69
Sailors.....	368	17,995	48.98	Teachers and Professors.....	160	8,032	50.20
Sea Captains.....	216	15,286	70.77	Teamsters.....	878	41,217	46.94
Servants.....	33	1,464	44.36	Telegraph and Telephone Operators.....	29	868	29.93
Sextons.....	13	813	62.54	Tinsmiths.....	164	8,049	49.08
Sheriffs and Policemen.....	161	8,759	54.40	Tobaccoists.....	19	1,073	56.47
Ship Carpenters.....	90	6,211	69.01	Traders.....	284	14,319	50.42
Silversmiths.....	163	7,412	45.47	Tradesmen, General.....	185	8,919	48.21
Slaters.....	12	572	47.67	Treasurers.....	16	812	50.75
Soldiers.....	164	5,067	30.90	Undertakers.....	62	3,519	56.76
Spinners.....	19	1,050	55.26	Upholsterers.....	69	2,910	42.17
Steampipers.....	26	1,020	39.23	Veterinary Surgeons.....	10	539	53.90
Stevedores.....	20	936	46.80	Waiters.....	162	6,431	39.70
Stewards.....	33	1,536	46.54	Watchmen.....	231	13,319	57.66
Stone Cutters and Marble Workers.....	28	1,373	49.04	Weavers.....	121	5,857	48.40
Students.....	96	2,224	23.17	Wheelwrights.....	131	7,949	60.68
Superintendents and Overseers.....	488	27,476	56.30	Wire Workers.....	22	937	42.59

TABLE XCV.—Concluded.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
MALES.				FEMALES.			
Wood Turners.....	67	3,046	45.46	Nurses.....	153	8,718	56.98
Wool Sorters.....	78	3,884	49.82	Operatives.....	1,236	39,734	32.15
Total.....	55,770	2,946,190	52.83	Physicians.....	12	677	56.42
FEMALES.				Rubber Workers.....	26	751	28.88
Boarding-house Keepers.....	27	1,677	62.11	Servants.....	664	31,304	47.14
Bookkeepers.....	26	783	30.12	Sisters of Mercy.....	40	1,615	40.37
Clerks and Saleswomen	71	2,141	30.15	Tailoresses.....	157	7,349	46.81
Cooks.....	73	3,835	52.53	Teachers.....	289	14,332	49.59
Dressmakers and Seamstresses..	456	18,906	41.46	Telegraph & Telephone Operators..	11	321	29.18
Jewelers.....	29	806	27.79	Waitresses.....	14	426	30.43
Laboring.....	18	783	43.50	Weavers.....	30	1,117	37.23
Laundresses.....	63	3,059	48.56	Total.....	3,464	140,764	40.64
Milliners.....	69	2,430	35.22	Grand Total.....	59,234	3,086,954	52.11

Diagram III. Exhibiting the comparative mortality by absolute number of decedents, from twenty principal causes of death in Rhode Island, in 1903.



THE RETURNS OF MEDICAL EXAMINERS.

The number of deaths investigated by the medical examiners during the year 1903 was 572. These deaths resulted from sudden, suspicious, unknown, and violent causes. Of this number 406, or 71 per cent., were males; and 166, or 29 per cent., were females.

HOMICIDE.—The number of deaths from homicide was 7, or 1.2 per cent. of the whole number investigated. Of the 7 cases of homicide, 5 were by gunshot wounds, 1 by strangulation, and 1 by cutting throat. In three cases the assailants were brought to trial, convicted, and sentenced. In two instances self-defense was made the excuse for the crime. Two assailants escaped.

SUICIDE.—The number of deaths by suicide reported by the medical examiners in 1903 was 48, or 8.4 per cent. of the whole number examined. Death was caused as follows: by drowning, 6; hanging, 8; illuminating gas, 11; incised wound of throat, 1; inhalation of chloroform, 1; by jumping from building, 1 (insane); by shooting, 7; by carbolic acid, 4; by corrosive sublimate, 1; cyanide potassium, 1; morphine, 2; paris green, 3; strychnia, 1; some unknown poison, 1.

ACCIDENTS.—The returns of the medical examiners show 288 deaths from accidents, specified as follows: asphyxia, 31; bicycle, 3; burns and scalds, 22; drowning, 65; electric car, 13; electric shock, 3; elevator, 2; exposure, 5; falls, 42; firearms, 3; machinery, 4; poison, 9; railroad, 50; and 36 various other accidents.

ASPHYXIA.—By bedclothes and overlying, 7; by illuminating gas,* 17; by coal-gas from furnace, 1; by marsh gas in manhole of sewer for wool washings, 2; choked while eating meat, 1 (adult); suffocated by food while eating, 1 (insane patient); suffocated while lying on face while intoxicated, 1; by button in larynx, 1. Total 31.

BICYCLE.—In collisions of bicycles, 2; by falling from bicycle to rocks, 1. Total, 3.

*Two of these were from leaking tubes from gas stoves.

BURNS AND SCALDS.—From rubbish fire, 3; by clothes taking fire from stove, 3; by kerosene used to clean boiler taking fire and igniting clothing, 1; playing with fire, 1; playing with matches, 4; by clothes taking fire from match, 1 (adult); by explosion of lamp, 2; by overturned lamp, 1; by pulling over kettle of hot water from stove, 1; by falling into kettle of hot water, 1; by falling into kettle of hot maccaroni, 1; scalded in hot bath given for convulsions, 1; by bursting of steam pipes, 2. Total, 22.

DROWNING.—Bathing or swimming, 8; through ice, 9; by capsizing of boats, 4; upset canoes, 2; foundering of sailboats in gale, 4; overboard from barge, 1 (intoxicated); from steamer, 1; from small boats while fishing, 5; from overcrowded row-boat, 2; from leaky boat, 2 (children); playing or paddling in water, 4; through railroad bridge into water, 2; by jumping from one mudscow to another, 1; by falling into raceway, 1 (child); in tub on floor, 1; drowned in vessel, infant born unexpectedly, 1; found in water, circumstances unknown, 17. Total, 65.

ELECTRIC CAR.—Struck by car, 6; run over while crossing track, 4; by head striking post while standing on running-board, 1; fall from car, 2. Total, 13.

ELECTRIC SHOCK.—While turning on current on incandescent lamp in stable, 1; from contact with live wire, 2 (one of these a lineman working on circuit). Total, 3.

ELEVATOR.—Crushed by elevator, 1; suffocated between elevator and ceiling, 1. Total, 2.

EXPOSURE TO EXTREME COLD.—Total, 5.

FALLS.—Downstairs or steps, 12; on ground or floor, 3; from staging, 8 (in one case by supports breaking; in three cases from careless fixing of ropes); from rigging, while hoisting coal, 1; from cross arms to deck, 1 (concussion of brain); into hold of vessel, 1; from roof while at work, 2; from telephone pole, 1 (a lineman); from hose wagon on way to fire, 1; from fence while running away from police, 1; from building, 1 (fractured pelvis); from tree, 2 (child and adult); from sister's arms to sidewalk, 1; from window, 4; fractured thigh from fall and delirium tremens, 2; from church steeple, 1. Total, 42.

FIREARMS.—By bullet wounds of head, 1 (age 16 years); by bullet wounds of chest, 1 (age 4 years); by gunshot wound of hand (tetanus), 1 (a 4th July accident). Total, 3.

MACHINERY.—Compound fracture of skull in bleachery, 1; skull fractured and brain lacerated by breaking of belt in mill, 1; arm torn from shoulder by being wound around shafting, 1; crushed between cylinders of carding machine in mill, 1. Total, 4.

POISON.—By overdose of morphine, 1; by overdose of chloral hydrate, 1; by wood alcohol, 1; by fumes of cyanide potassium, 1; by cough medicine, containing opium given to infant, 1; strychnia tablets mistaken by children for candy, 3; by drinking fly-poison, 1 (child). Total, 9.

RAILROAD.—There were 50 deaths by railroad accidents in medical examiners' returns for 1903.

ACCIDENTS, VARIOUS.—Hit in boxing-match, concussion of brain, 1; crushed under falling wood-pile, 1; run over by wagons while crossing street, 2; runaway accidents, dislocated neck and crushed skull, 2; thrown from carriage, fractured patella, 1; run over by heavy teams, 6 (children); run over by load of stones, 1 (driver fell from seat); run over by team, 1 (driver); crushed between load of stones and steam roller, 1 (adult); crushed between tip-cart and fence, 1 (child); struck on jaw by truck which was hit by train, 1; fractured skull by piece of timber thrown by wheel of team, 2; by circular saw, head severed, 1; struck by piece of board from buzz-saw, 1; by falling chimney while working upon it, 3; struck by foul ball (baseball), (hemorrhage of brain), 1; knocked down by blow from fist in fight, 2; knocked from staging by hoisting apparatus, 1; kicked by horse, 1; injury to foot by stepping on rusty nail, tetanus resulting, 1; injury to head while working in trench, 1; blasting accident, struck by stone, 1; pushed or fell through window in street fight, severed artery, 1; fractured sternum and ribs, circumstances unknown, 1; struck by lightning, 1. Total, 36.

The whole number of deaths by accident in the State during 1903 was 376, showing that there were 88 deaths by accident where no medical examiner was called. In these cases a physician had been in attendance and had reported the cause of death. In many instances the death was not immediate. The division of these 376 deaths by accident was as follows (see page 190 of this report): asphyxia, 31; bicycle, 3; burns and scalds, 34; drowning, 72; electric car, 12; electric shock, 4; elevator, 2; exposure to cold, 5; falls, 79; firearms, 5; heat, 7; lightning, 1; machinery, 5; poison 9; railroad, 52; and 55 by various other accidents.

A comparison of these figures with the cases which are viewed by medical examiners will show the cases which are more open to sus-

picion of avoidable violence. The difference, 37, is more marked under the clause of falls.

Under sudden deaths which were investigated by medical examiners, were alcoholism, 12; alcoholism and Bright's disease, 2; alcoholism and exposure, 3; alcoholism and intense heat, 1; alcoholism and hernia, 1; alcoholism and heart disease, 2; angina pectoris, 3; apoplexy and cerebral hemorrhage, 14; asthma, 2; acute arthritis of ankle, septicemia, 1; acute bronchitis, 3; chronic bronchitis, 1; broncho-pneumonia, 3; pneumonia, 5; cancer of stomach, 2; carbuncle, 1; pulmonary tuberculosis, 15; abdominal tuberculosis, 1; infantile convulsions, 1; erysipelas of face, 1; diabetes, 1; diphtheria, 1; edema of lungs, 1; epilepsy, 7; gastro-enteritis, 2; gangrene of foot and leg, 1; heart disease, 56; valvular disease of heart, 4; hemorrhage of lungs, 5; indigestion and convulsions, 6 (infants); influenza, 1; kidney disease, 1; laryngitis, 1; malnutrition, bed-sores, lack of care, 1 (adult); marasmus, improper feeding, 4 (infants); measles, 2; neglect and exposure, 1 (infant); nephritis, 7; uremic convulsions, 5; nonclosure foramen ovale, 1; old age, 4; parotitis or mumps, 1; pleurisy and alcoholism, 1; premature birth, 6; pulmonary stenosis, 1; whooping cough, 4; septicemia, following criminal abortion, 1; instrumental delivery, difficult labor, 2 (infants); infanticide, probably, body found in bushes, 1; infanticide, probably, body found in barn, 1; premature birth, still-born, 2; still-born, 7; cause unknown (adults), 8; cause unknown (infants), 7.

YEARS.	Homicide.		Suicide.		Accident or Negligence.		Natural and Unknown Causes, Including Alco- holism.		Total.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
1894.....	9	3.1	45	15.6	141	49.0	93	32.3	288
1895.....	6	1.7	31	8.5	223	61.4	103	28.4	363
1896.....	1	0.3	27	8.3	177	54.3	121	37.1	326
1897.....	12	3.4	32	9.2	157	45.1	147	42.3	348
1898.....	12	3.1	41	10.7	203	53.0	127	33.2	383
1899.....	15	3.2	39	8.4	214	45.8	199	42.6	467
1900.....	15	2.8	59	11.2	258	48.8	197	37.2	529
1901.....	6	1.1	55	10.2	276	51.0	204	37.7	541
1902.....	11	2.2	56	11.3	258	52.0	171	34.5	496
1903.....	7	1.2	48	8.4	288	50.5	229	40.0	572

THE INTERNATIONAL CLASSIFICATION

OF

CAUSES OF DEATH.

Adopted by the United States Census Office for the Compilation of Mortality Statistics, for use beginning with the year 1900.

DETAILED CLASSIFICATION.

ALL CAUSES (STILL-BIRTHS EXCLUDED).

I.

General Diseases.

(A. Epidemic Diseases.)

1. Typhoid Fever (Abdominal Typhus).
2. Exanthematic Typhus.
3. Relapsing Fever.
4. Intermitent Fever and Malarial Cachexia.
4. *Repeated. Malarial Cachexia.*
5. Smallpox.
6. Measles.
7. Scarlet Fever.
8. Whooping Cough.
9. Diphtheria and Croup.
9. *Repeated Diphtheria.*
10. Influenza.
11. Miliary Fever.
12. Asiatic Cholera.
13. Cholera Nostras.
14. Dysentery.
14. *Repeated. Epidemic Dysentery.*
15. Bubonic Plague.
16. Yellow Fever.
17. Leprosy.
18. Erysipelas.
19. Other Epidemic Diseases.

(B. Other General Diseases.)

20. Purulent Infection and Septicemia.
21. Glanders and Farcy.
22. Malignant Pustule.
23. Rabies.
24. Actinomycosis, Trichinosis, etc.
25. Pellagra.

27. Tuberculosis of the Lungs.
26. Tuberculosis of the Larynx.
28. Tuberculosis of the meninges.
29. Abdominal Tuberculosis.
30. Pott's Disease.
31. Cold Abscess, Abscess by Congestion
32. White Swelling.
33. Tuberculosis of Other Organs.
34. General Tuberculosis.
35. Scrofula.
36. Syphilis.
37. Gonorrhea (5 years and over.)
38. Gonorrhea (under 5 years).
39. Cancer and Other Malignant Tumors of the Buccal Cavity.
40. Cancer and Other Malignant Tumors of the Stomach and Liver.
41. Cancer and Other Malignant Tumors of the Peritoneum, Intestines and Rectum.
42. Cancer and Other Malignant Tumors of the Female Genital Organs.
43. Cancer and Other Malignant Tumors of the Breast.
44. Cancer and Other Malignant Tumors of the Skin.
45. Cancer and Other Malignant Tumors of Other Organs, or of Organs not Specified.
46. Other Tumors (tumors of the Female Genital Organs excepted).
47. Acute Articular Rheumatism.
48. Chronic Rheumatism and Gout.
49. Scurvy.
50. Diabetes.
51. Exophthalmic Goitre.
52. Addison's Disease.
53. Leukemia.
54. Anemia, Chlorosis.
56. Acute and Chronic Alcoholism.

- 57. Chronic Lead Poisoning.
- 58. Other Chronic Poisonings (occupational).
- 59. Other Chronic Poisonings.
- 55. Other General Diseases.

II.

Diseases of the Nervous System and
Organs of Special Sense.

- 60. Encephalitis.
- 61. Simple Meningitis.
- 61. *Repeated. Epidemic Cerebro-spinal Meningitis.*
- 62. Progressive Locomotor Ataxia.
- 63. Other Diseases of the Spinal Cord.
- 64. Congestion and Hemorrhage of the Brain.
- 65. Softening of the Brain.
- 66. Paralysis Without Specified Cause.
- 67. General Paralysis.
- 68. Other Forms of Mental Alienation.
- 69. Epilepsy.
- 70. Convulsions (Non-Puerperal; 5 years and over).
- 71. Convulsions (under 5 years).
- 72. Tetanus.
- 73. Chorea.
- 74. Other Diseases of the Nervous System.
- 75. Diseases of the Eye and its Adnexa.
- 76. Diseases of the Ear.

III.

Diseases of the Circulatory System.

- 77. Pericarditis.
- 78. Acute Endocarditis.
- 79. Organic Diseases of the Heart.
- 80. Angina Pectoris.
- 81. Diseases of the Arteries, Atheroma, Aneurism, etc.
- 82. Embolism and Thrombosis.
- 83. Diseases of the Veins (Varices, Hemorrhoids, Phlebitis, etc.).
- 84. Diseases of the Lymphatic System (Lymphangitis, etc.).
- 85. Hemorrhages.
- 86. Other Diseases of the Circulatory System.

IV.

Diseases of the Respiratory System.

- 87. Diseases of the Nasal Fossae.
- 88. Diseases of the Larynx.
- 89. Diseases of the Thyroid Body.
- 90. Acute Bronchitis.
- 91. Chronic Bronchitis.
- 92. Broncho-pneumonia.
- 93. Pneumonia.
- 94. Pleurisy.
- 95. Congestion and Apoplexy of the Lungs.
- 96. Gangrene of the Lungs.
- 97. Asthma.
- 98. Pulmonary Emphysema.
- 99. Other Diseases of the Respiratory System (Phthisis excepted).

V.

Diseases of the Digestive System.

- 100. Diseases of the Mouth and its Adnexa.
- 101. Diseases of the Pharynx.
- 102. Diseases of the Esophagus.
- 103. Ulcer of the Stomach.

- 104. Other Diseases of the Stomach (Cancer excepted).
- 105. Diarrhea and Enteritis (under 2 years).
- 105. *Repeated. Chronic Diarrhea and Enteritis (under 2 years).*
- 106. Diarrhea and Enteritis (2 years and over).
- 107. Intestinal Parasites.
- 108. Hernia and Intestinal Obstructions.
- 109. Other Diseases of the Intestines.
- 110. Acute Yellow Atrophy of Liver.
- 111. Hydatid Tumors of the Liver.
- 112. Cirrhosis of the Liver.
- 113. Biliary Calculi.
- 114. Other Diseases of the Liver.
- 115. Diseases of the Spleen.
- 116. Simple Peritonitis (Non-puerperal).
- 118. Appendicitis and Abscess of the Iliac Fossa.
- 117. Other Diseases of the Digestive System (Cancer and Tuberculosis excepted).

VI.

Diseases of the Genito-Urinary System
and its Adnexa.

- 119. Acute Nephritis.
- 120. Bright's Disease.
- 121. Other Diseases of the Kidneys and their Adnexa.
- 122. Calculi of the Urinary Tract.
- 123. Diseases of the Bladder.
- 124. Diseases of the Urethra, Urinary Abscess, etc.
- 125. Diseases of the Prostate.
- 126. Non-venereal Diseases of the Male Genital Organs.
- 127. Metritis.
- 128. Uterine Hemorrhage (Non-puerperal).
- 129. Uterine Tumor (Non-cancerous).
- 130. Other Diseases of the Uterus.
- 131. Cysts and Other Tumors of the Ovary.
- 132. Other Diseases of the Female Genital Organs.
- 133. Non-puerperal Diseases of the Breast (Cancer excepted).

VII.

The Puerperal State.

- 134. Accidents of Pregnancy.
- 135. Puerperal Hemorrhage.
- 136. Other Accidents of Labor.
- 137. Puerperal Septicemia.
- 138. Puerperal Albuminuria and Convulsions.
- 139. Phlegmasia Alba Dolens (Puerperal).
- 140. Other Puerperal Accidents—Sudden Death.
- 141. Puerperal Diseases of the Breast.

VIII.

Diseases of the Skin and Cellular Tissue.

- 142. Gangrene.
- 143. Furuncle.
- 144. Acute Abscess, Phlegmon.
- 145. Other Diseases of the Skin and its Adnexa.

IX.

Diseases of the Organs of Locomotion.

- 146. Non-tuberculous Diseases of the Bones.

147. Arthritis and Other Diseases of the Joints (Tuberculosis and Rheumatism excepted).
 { 148. Amputation.
 { 149. Other Diseases of the Organs of Locomotion.

X.

Malformations.

150. Congenital Malformations (Stillbirths excluded).

XI.

Early Infancy.

- { 151. Congenital Debility, Icterus and Sclerema.
 { 152. Other Diseases Peculiar to Early Infancy.
 { 153. Lack of Care.

XII.

Old Age.

154. Senile Debility.

XIII.

External Causes.

- { 155. Suicide by Poison.
 { 156. Suicide by Asphyxia.
 { 157. Suicide by Hanging or Strangulation.
 { 158. Suicide by Drowning.
 { 159. Suicide by Firearms.
 { 160. Suicide by Cutting Instruments.
 { 161. Suicide by Jumping from High Places.
 { 162. Suicide by Crushing.
 { 163. Other Suicides.
 { 164. Fractures.
 { 165. Dislocations.
 { 167. Burns and Scalds.
 { 168. Burns from Corrosive Substances.
 { 169. Sunstroke.
 { 170. Freezing.
 { 171. Electric Shock.
 { 172. Accidental Drowning.
 { 173. Inanition (Starvation).
 { 174. Absorption of Deleterious Gases (Non-Suicidal).
 { 175. Other Acute Poisonings.
 { 166. Other Accidental Traumatisms.
 { 176. Other External Violence.

XIV.

Ill-Defined Diseases.

- { 177. Dropsy.
 { 178. Sudden Death.
 { 179. Causes of Death Unspecified or ill-defined.

APPENDIX B.

THE LAWS OF RHODE ISLAND

(As amended February 1, 1896.)

IN RELATION TO THE REGISTRATION OF

BIRTHS, MARRIAGES, AND DEATHS,

AND OF DIVORCE.

GENERAL LAWS, CHAPTER 100.

OF THE REGISTRATION OF BIRTHS, MARRIAGES, AND DEATHS.

SECTION 1. The town clerks of the several towns, or any person whom the board of aldermen of any city, or the town council of any town, may appoint for that purpose, shall obtain, chronologically record and index, as required by the forms prescribed by section three of this chapter, all information concerning births, marriages, and deaths occurring among the inhabitants of their respective towns; and on or before the first Monday in March, annually, shall make duly certified returns thereof to the secretary of the state board of health for the year ending on the thirty-first day of December next preceding, accompanying the same with a list of the persons required by law to make returns to them who have neglected to do so, and with such remarks relating to the object of this chapter as they may deem important to communicate.

SEC. 2. The secretary of the state board of health shall receive the returns made in pursuance of the preceding section, and annually make a general abstract and report thereof, in form as prescribed by section three of this chapter, and publish not exceeding one thousand copies thereof; and for preparing, tabulating, and publishing said annual report such sum as may be provided by law shall be paid to the state registrar. Said returns, after such report is prepared, shall be deposited in the office of the secretary of state, who shall cause the same to be

arranged, full alphabetical indices of all the names to be made, and the whole to be bound in volumes of convenient size and carefully preserved in his office.

SEC. 3. The blank forms required to carry out the provisions of this chapter shall, on application, be furnished by the secretary of the state board of health to clergymen, physicians, undertakers, town clerks, clerks of meetings of the Society of Friends, and other persons requiring them, substantially as follows: The record of a birth shall state the date and place of birth, name of the child if it has any, the sex and color of the child, whether born alive or still-born, the name and surname, color, residence, and birthplace of the parents, and the occupation of the father, and the time of recording, so far as the same can be ascertained. The record of a marriage shall state the date of the marriage, place, name, residence, and official station of the person by whom married, names and surnames of the parties, age, color, occupation, and residence of each, condition, that is, whether single or widowed, what marriage, that is, whether first, second, third, or other marriage, the occupation, birthplace, and name of their parents, and the time of recording, so far as the same can be ascertained. The record of deaths shall state the date of the death, name and surname of deceased, the sex, color, and condition, whether single or married, age, occupation, place of death, place of birth, name and birthplace of parents, disease or cause of death, and the time of recording, so far as can be ascertained.

SEC. 4. Every meeting of the Society of Friends, clergymen, and all others authorized to join persons in marriage, shall make a faithful record of every such rite performed by them, in manner and form aforesaid, and return the same for the last preceding month, on or before the second Monday of every month, to the town clerk of the town in which such rite shall have been performed; and no marriage shall be solemnized until the parties shall have signed and delivered to the person about to solemnize it, or to a clerk of a meeting of the Society of Friends, a certificate containing the information required for the record of a marriage, as prescribed by this chapter.

SEC. 5. The town clerk of every town shall annually, in the month of January, collect the information required by this chapter, in relation to all children born in the town during the year ending on the thirty-first day of December next preceding.

SEC. 6. Physicians and midwives shall, on or before the fifth day of each month, report to the clerk of each city or town a correct list of all children born therein during the month next preceding, at whose birth they were present, stating the date and place of each birth, the name of the child if it has any, the sex and color of the child, the name, place of birth and residence of the parents, and the occupation of the father. The fee of the physician or midwife shall be twenty-five cents for each birth so reported, and shall be paid by the city or town in which the report is made.

SEC. 7. Whenever any person shall die, or any still-born child shall be brought forth in this state, the physician attending at such bringing forth or last sickness, if any physician so attended, shall, within forty-eight hours after such

death or bringing forth, leave with the family, if any, or person having the care of the deceased, or the person bringing forth such still-born child, or give to the undertaker or person who conducts the funeral, a certificate stating, in case of a death, the name of the deceased, the date of the death, and the disease or cause of the death; and in case of the bringing forth of a still-born child, the date and the cause of such child being brought forth still-born: *Provided, however,* that if the physician last in attendance shall not have knowledge of such death, or is otherwise reasonably prevented from leaving with the family or giving the undertaker such certificate within the time hereinbefore specified, or before the funeral or disposal of the remains of the deceased, he shall, within five days after having knowledge of such death by notification or otherwise, send to the town or city clerk or registrar of the town or city in which such death occurred a certificate, stating the name, date, and disease or cause of death of such decedent.

SEC. 8. Every town council may appoint a sufficient number of persons to act as undertakers, removable at the pleasure of such council.

SEC. 9. No undertaker or other person shall conduct a funeral, or bury or deposit in a tomb, or remove from this state or otherwise dispose of the remains of any deceased person or still-born child, unless he shall first obtain the physician's certificate required by section seven of this chapter, if a physician was in attendance upon such person who has deceased or the person bringing forth such still-born child, and shall return the same, together with his own certificate of the information required by section three of this chapter, to the town clerk of the town where such death or bringing forth took place: *Provided, however,* that in such towns as allow the burial or removal of bodies of deceased persons without a permit from the town clerk, and if the undertaker or other person who has charge of the disposal of the remains of the deceased person is unable to obtain the said physician's certificate, after reasonable attempts therefor, before the burial or removal of the said remains, then the said undertaker or other person shall make his return as required by section three of this chapter, including the cause of death and the name of the physician last in attendance upon the deceased, immediately to the town or city clerk or registrar of the town or city in which the death occurred. He shall, also, within two days thereafter, notify the physician last in attendance upon the deceased person of the name and date of death of the same.

SEC. 10. Clergymen of all denominations who officiate at the funerals of decedents when no undertaker is in attendance shall, when requested by the state registrar, or the town or city clerk or registrar of the town or city in which such deaths occurred, make returns of such deaths in the same manner and with the same compensation as undertakers.

SEC. 11. Any town may make ordinances more effectually to attain the objects herein contemplated.

SEC. 12. The town clerks, or persons appointed as aforesaid, shall receive for each record of a death made and returned as required by law, and for each

record of a marriage made and returned as required by law, twenty cents, to be paid to them out of their respective town treasuries: *Provided*, that the yearly compensation to be paid out of the town treasury as aforesaid, to any one town clerk or person appointed as aforesaid, who shall perform the duties prescribed by this chapter, shall not be less than five dollars. Undertakers and others making returns of deaths, as required by sections seven and nine of this chapter, shall receive for each full report of a death made to the town clerk, five cents in the cities of Providence and Newport, and ten cents in the other towns of the state.

SEC. 13. Every clergyman, physician, midwife, undertaker, town clerk, clerk of any meeting of the Society of Friends, or other person who shall willfully or unreasonably neglect or refuse to perform any of the duties imposed on or required of him by this chapter, shall be fined not exceeding twenty dollars nor less than two dollars for each offence, one-half thereof to the use of the town in which the offence shall occur, and one-half thereof to the use of the person who shall complain of the same.

SEC. 14. Every clergyman, physician, coroner, undertaker, medical examiner, or clerk of any meeting of the Society of Friends, shall cause his name, residence, and post-office address to be recorded in the town clerk's office of the town where he resides.

SEC. 15. No letters of administration or letters testamentary shall be granted by any court of probate upon the estate of any person, until the death of such person, or the facts from which the same is presumed, shall be duly certified, as near as may be, to the town clerk, in order that the same may be duly registered according to the provisions of this chapter.

SEC. 16. The town and city clerks, and registrars of the several towns and cities, shall have the custody of all records of births, deaths, and marriages of their respective towns, whether made under the statutes now in force or any former statute, and a certificate signed by them, certifying that any written or printed statement of any marriage, birth, or death is a true copy of the record in their custody, shall be admitted as evidence of such marriage, birth, or death.

SEC. 17. Births, marriages, and death of non-residents shall be distinguished from those of residents in the returns by being arranged separately.

SEC. 18. The secretary of the state board of health may from time to time vary the forms of returns, and require such additional information as he may consider necessary to accomplish the object of this chapter.

SEC. 19. The town clerks or other officers appointed under this chapter to collect, record, and return the births in the several cities and towns, shall receive fees therefor as follows: For making record and return of these facts as required by law, twenty cents for each entry and return; to be paid by the city or town in which the birth is recorded.

SEC. 20. The clerk or registrar of each town and city shall, on the first day of each and every month, make a certified copy of all births, marriages, and deaths recorded in the books of said town or city during the previous month,

whenever the parents of the child born, or the bride or the groom, or the deceased person, were resident in any other town or city in this state, or in any other state, at time of said birth, marriage, or death; and shall transmit such certified copies to the clerk or registrar of the town, city, or state in which such parents of the child born, the bride or the groom, or the deceased, were resident at the time of said birth, marriage, or death, stating, in case of a birth, the name of the street and number of the house, if any, where such parents resided, the place of birth of such parents, and the maiden name of the mother, whenever the same can be ascertained; and the clerk or registrar so receiving such certified copies shall record the same in the books kept for recording births, marriages, and deaths. Such certified copies shall be made upon blanks to be furnished for that purpose by the secretary of the state board of health.

SEC. 21. The town clerks of the several towns, or other persons appointed under this chapter to collect the births in the several towns, shall annually in the month of January collect the facts concerning the births within their respective towns, required by this chapter, and shall, so far as practicable, at the same time collect the names of all persons liable to be enrolled in the militia, as required by title thirty-four, and the census of all persons between the ages of five and fifteen years inclusive, as provided by chapter fifty-four, and shall receive therefor such compensation as the town council or the board of aldermen of their respective cities shall determine: *Provided*, that the city of Providence shall be exempt from so much of the provisions of this section as relates to the collection of the statistics of births.

SEC. 22. Blanks for the foregoing purposes shall be furnished, on application therefor, on or before the first day of December in the year preceding, by the state board of health for the collection of births, by the adjutant-general for the taking of the enrolled militia, and by the commissioner of public schools for the census aforesaid.

SEC. 23. The person or persons who shall discharge the duties required by section twenty-one of this chapter, if other than the town clerk, shall make full return thereof to the town clerk of his or their town, on or before the tenth day of February next following.

SEC. 24. The returns required to be made by the clerks of the appellate division of the supreme court, in relation to divorces, to the secretary of the state board of health, or a prepared abstract thereof, shall be published in the annual report of the births, marriages, and deaths in the state.

SYNOPSIS OF THE LAW OF MARRIAGE.

GENERAL LAWS, CHAPTER 191.

SECTIONS 1, 2, and 3 show what kindred persons cannot marry, and declare marriages within prohibited degrees null and void.

SECTION 4 makes an exception in favor of Jews, within the degrees of affinity or consanguinity allowed by their religion.

SECTION 5 declares the marriage of persons having a husband or wife living, and of idiots and lunatics, absolutely void.

SEC. 6. Any minister or elder of any religious denomination who shall be *domiciled* in the state, and shall have *registered* with the town clerk and have received a *license*, may join persons in marriage in this state.

SECTION 7 designates who shall be considered as belonging to a religious denomination within the meaning of the preceding section.

SEC. 8. Wardens in the town of New Shoreham may join persons in marriage in said town.

SECTION 9 designates who may join persons in marriage when solemnized among Quakers, or among persons professing the Jewish religion.

SEC. 10. Persons intending to be joined together in marriage in this state must first obtain a license from the town or city clerk of the town in which they respectively reside, or, if not residents of the state, from the clerk of the town or city in which the marriage is to be solemnized. The license shall contain the information called for so far as the same is known to such persons, each of whom shall subscribe to the truth of the same in the presence of the clerk or an assistant clerk of that town or city in which they respectively reside. For issuing such license the town or city clerk shall be entitled to a fee of one dollar: *Provided*, that when the persons intending to be joined in marriage live in different towns or cities in this state the fee shall be fifty cents in each town or city. Such license shall be presented to the minister, elder, justice, warden, or other person who performs the marriage ceremony.

SECTION 11 provides for the control of marriages of minors, and requires the written consent of the parent or guardian before the information provided for in section ten can be given. Persons over eighteen years of age, however, who may have no parent or guardian, may make oath relative to that fact to the city or town clerk, and may then give the required information called for in the application.

SECTION 12 requires that *each* of the persons married must present to the officiating clergyman a certified copy, as provided in section ten. These must

also be signed by the respective parties to the marriage in the presence of the clergyman. This is intended to identify the parties as being the same who appeared for the certificate from the town clerk.

SECTION 13 requires that the officiating clergyman shall endorse the certificate stating that he has joined the parties in marriage, and also that two witnesses of the marriage shall append their signatures. It also provides that the minister shall make a return of the certificate to the town clerk on or before the second Monday of the month succeeding the date of the marriage.

SECTION 14 provides for the care and preservation of the records.

SECTION 15 provides for the work of registration in the city of Providence to be done by the city registrar.

SECTION 16 provides for the recording of the returned certificates in the office of the town clerk, and the final lodgment of the certificates with the secretary of state. These are there to be properly indexed, and open to inspection only in the presence of some one connected with the office of the secretary of state.

SECTION 17 provides that two witnesses shall be present at the marriage ceremony.

SECTION 18 provides that lawful objection to a marriage shall be made in writing, and the officiating clergyman shall not proceed with the marriage until the objection is removed.

SECTION 19 provides for a penalty of six months imprisonment, or a fine of one thousand dollars, for joining persons in marriage without first having been presented with the certified copies required in section ten, or without having first returned any lawful objection to the marriage.

SECTION 20 provides for a penalty a fine of not exceeding one hundred dollars, for failure to perform any of the duties devolving upon the officiating officer under this chapter.

SECTION 21 provides for a fine for joining persons in marriage who have a husband or wife living.

SECTION 22 provides that no marriage shall be deemed or adjudged to be void by any failure on the part of the officiating officers to comply with the law, if the marriage is in other respects lawful and has been performed with a full belief on the part of the persons so married, or either of them, that they have been lawfully joined in marriage.

SEC. 23. Every person who shall solemnize a marriage without being legally authorized thereto shall be fined five hundred dollars.

GENERAL LAWS, CHAPTER 195.

OF DIVORCE.

SECTION 1. Divorces from the bond of marriage shall be decreed in case of any marriage originally void or voidable by law, and in case either party is for crime deemed to be or treated as if civilly dead, or from absence or other circumstances may be presumed to be actually dead.

SEC. 2. Divorces shall be decreed for impotency, adultery, extreme cruelty, willful desertion for five years of either of the parties, or for such desertion for a shorter period of time in the discretion of the court, for continued drunkenness, for the habitual, excessive, and intemperate use of opium, morphine, or chloral, for neglect or refusal on the part of the husband, being of sufficient ability, to provide necessities for the subsistence of his wife, and for any other gross misbehavior and wickedness in either of the parties repugnant to and in violation of the marriage covenant.

SEC. 3. Whenever in the trial of any petition for divorce from the bond of marriage it shall be alleged in the petition that the parties have lived separate and apart from each other for the space of at least ten years, the court may in its discretion enter a decree divorcing the parties from the bond of marriage, and may make provisions for alimony.

SEC. 4. Whenever it shall appear that the absence, adultery, cruelty, desertion, or other cause of complaint as aforesaid was committed or occasioned by the collusion of the parties, and done and contrived with an intention to procure a divorce, in such case no divorce shall be decreed.

SEC. 5. Whenever a divorce is granted for fault on the part of the husband, the wife shall have dower as if the husband were dead; but such dower shall be claimed on proceedings begun within six months after the absolute decree, and, if not claimed within said period, or if claim be made for alimony within said period, then dower shall be deemed to be waived and released, and the only relief of the wife shall be a claim for alimony chargeable upon the estate of the husband, or some specific portion thereof as the court may decree: *Provided*, that in case of such divorce between parties married before the Digest of eighteen hundred forty-four went into operation, the wife shall be re-instated in all of her real estate, and have restored to her all of her personal estate not, in either case, disposed of at the date of the filing of the petition for said divorce.

SEC. 6. Whenever a divorce is granted for fault on the part of the wife, the husband, if he be entitled to curtesy-initiate, shall have a life estate in all the lands of the wife as if the wife were dead, but subject to such allowance to the

wife, to be charged on such life estate, as the court in the peculiar circumstances of the case may deem just and proper.

SEC. 7. Otherwise than as provided in the two preceding sections neither husband or wife, on divorce being granted, shall have any right in the estate of the other.

SEC. 8. Divorces from bed, board, and further cohabitation, until the parties be reconciled, may be granted for any of the causes for which by law a divorce from the bond of marriage may be decreed, and for such other causes as may seem to require the same. In case of such divorce the court may assign to the petitioner a separate maintenance out of the estate or property of the husband or wife, as the case may be, in such manner and of such amount as it may think necessary or proper.

SEC. 9. Every petition shall be signed by the petitioner, if of sound mind and of legal age to consent to marriage; otherwise, upon application to the court, and after notice to the party in whose name the petition shall be filed, the court may allow such petition to be signed by a guardian or next friend.

SEC. 10. No petition for divorce shall be granted unless the petitioner shall at the time of preferring such petition be a domiciled inhabitant of this state, and have resided therein for the period of one year next before the preferring of such petition.

SEC. 11. All such petitions shall be filed, heard, and tried in Providence, unless the petitioner shall reside in the county of Newport or in the county of Washington, in which case such petition shall be filed, heard and tried in Newport or South Kingstown respectively.

SEC. 12. The court may by general rule determine the return-day of petitions for divorce and prescribe the notice to be given, within or without the state, on all such petitions, and may issue such process as may be necessary to carry into effect all powers conferred upon it in relation to the same; and said court may also, by general rule, fix the times, during its session, when all petitions for divorce shall be heard, as they may be filed in Providence, Newport, or South Kingstown, respectively. Such general rules shall, however, be subject to such special orders as the court may make in special cases. And, until general rules are made, special order in each case shall be made.

SEC. 13. Whenever any petition for divorce shall have been filed or be pending in the appellate division of the supreme court, and said court shall be of the opinion that sufficient notice of the pendency of said petition shall not, from any cause, have been given to the adverse party, said court may order notice or further notice to the adverse party to be given in such manner as the court may prescribe.

SEC. 14. The said court may regulate the custody and provide for the education, maintenance, and support of the children of all persons by them divorced or petitioning for a divorce, and all persons to whom a separate maintenance may be granted or who may petition for the same; may in its discretion make such allowance to the wife, out of the estate of the husband, for the purpose

of enabling her to prosecute or defend against any such petition for divorce or separate maintenance, in case she has no property of her own available for such purpose, as they may think reasonable and proper; and may make all necessary orders and decrees concerning the same, and the same may at any time alter, amend, and annul for sufficient cause, after notice to the parties interested therein.

SEC. 15. Any woman to whom a divorce from the bond of marriage is decreed may be authorized by such decree to change her name, subject to the same rights and liabilities as if her name had not been changed.

SEC. 16. After the filing and during the pendency of any petition for divorce the said court may make such interlocutory decrees and grant such temporary injunctions as may be necessary until a hearing can be had before said court.

GENERAL LAWS, CHAPTER 225.

OF DIVORCES.

SECTION 9. The clerks of the appellate division shall make returns to the secretary of the state board of health, on or before the first day of March in each and every year, for the year ending on the thirty-first day of December preceding, of all the applications for divorce, showing the number of applications, the number thereof continued, the number granted, and the causes for which the same are granted, but without the names of the parties, in accordance with the blanks which shall be furnished them by the secretary of state.

GENERAL LAWS, CHAPTER 287.

OF MEDICAL EXAMINERS AND CORONERS.

SECTION 1. The governor shall appoint, in each county, able and discreet men, learned in the science of medicine, to be medical examiners in such county.

SEC. 2. The number of medical examiners appointed as provided in the preceding section shall be as follows:

For the county of Washington five examiners, one in each of the five following districts, viz.: District one, composed of the town of Westerly; district two, of the town of South Kingstown; district three, of the town of Hopkinton; district four, of the towns of North Kingstown and Exeter; district five, of the towns of Charlestown and Richmond.

For the county of Kent two examiners, one in each of the two following districts, viz.: District one, composed of the towns of West Greenwich and Coventry; district two, of the towns of East Greenwich and Warwick.

For the county of Providence eleven examiners, one in each of the first nine following districts, and in district ten two examiners, viz.: District one composed of the towns of Scituate and Foster; district two, of the towns of Cranston and Johnston; district three, of the town of Glocester; district four, of the towns of Smithfield and North Providence; district five, of the towns of Burrillville and North Smithfield; district six, of the city of Woonsocket; district seven, of the town of Cumberland; district eight, of the cities of Pawtucket and Central Falls and the town of Lincoln; district nine, of the town of East Providence; district ten, of the city of Providence.

For the county of Bristol two examiners, one in each of the following districts, viz.: District one, composed of the towns of Barrington and Warren; and district two, of the town of Bristol.

*The number of medical examiners for the county of Newport shall be five, one in each of the first three districts and two in district four; and said districts shall be composed as follows: District one, of the towns of Tiverton and Little Compton; district two, the town of Portsmouth; district three, the town of New Shoreham; district four, the city of Newport and the towns of Middletown and Jamestown.

SEC. 3. If either of the medical examiners shall, at any time, from any cause, be unable to perform the duties of his said office, or shall be deemed by the attorney-general for any cause disqualified therefor, a medical examiner from an adjoining district may be called upon to perform them.

SEC. 4. Every medical examiner shall hold his office for the term of six years, and until another is appointed and qualified to act in his place, unless sooner removed by the appointment of some other person to fill his place.

SEC. 5. Every medical examiner shall, within thirty days after his appointment, and before entering upon the duties of his office, give bond with surety to, and to the satisfaction of, the general treasurer in the sum of one thousand dollars for the faithful performance of his duties.

SEC. 6. If the condition of any such bond be broken, to the injury of any person, actions may be brought upon such bond as upon the official bonds of sheriffs.

SEC. 7. Medical examiners shall make examinations as hereinafter provided, upon bodies of such persons only as are supposed to have come to their death by violence: *Provided*, that in case any prisoner in the state prison or in any county jail dies while so imprisoned, it shall be the duty of the medical examiner of the district in which such prison or county jail is situated, upon being notified of the death of such prisoner, to make at once an examination upon the body of such deceased prisoner.

SEC. 8. When a medical examiner has notice that there has been found, or is lying, within his district the body of a person who is supposed to have come to his death by violence, he shall forthwith repair to the place where such body lies

* As amended April 16, 1896.

and take charge of the same; and if, on view thereof and personal inquiry into the cause and manner of the death, he deems a further examination necessary, he shall, upon being thereto authorized in writing by the attorney-general, or by the mayor of the city or president of the town council of the town where such body lies, make an autopsy in the presence of two or more discreet persons as witnesses, and shall then and there carefully reduce, or cause to be reduced, to writing every fact and circumstance tending to show the condition of the body and the cause and manner of death, together with the names and addresses of said witnesses, which record he shall subscribe. Before making such autopsy he shall call the attention of the witnesses to the position and appearance of the body.

SEC. 9. Should the medical examiner deem it advisable to have present a physician as one of the witnesses as aforesaid, such physician shall also subscribe the record made by the medical examiner, and for such service he shall receive a compensation of five dollars.

SEC. 10. Town councils shall select a suitable person to act as coroner for their respective towns, to hold his office for three years and until another is elected and qualified to act in his place, unless sooner removed by the election of some other person to fill his place.

SEC. 11. The coroners so elected shall have exclusive jurisdiction as coroners in their respective towns.

SEC. 12. The coroner shall appoint in writing, under his hand and seal, one or more discreet persons to act as his deputy in case of his absence or inability to act, who shall have all the powers of a coroner, and be subject to like pains and penalties, for malfeasance in office; and the coroner shall file a copy of the appointment in the town clerk's office of his town.

SEC. 13. The coroner may suspend or discharge a deputy. The suspension or discharge of a deputy shall be in writing, addressed to the deputy; and the coroner shall forthwith file a duplicate thereof in the town clerk's office of his town.

SEC. 14. Every coroner and deputy coroner shall, before entering upon the duties of his office, take the engagement prescribed in section five of chapter twenty-five.

SEC. 15. Whenever the coroner has notice that there is in his town any person who has been injured by the criminal act, omission, or carelessness of another, and that said person believes that his death is impending from such injury, said coroner may take the statement of such person concerning the manner in which, and the person by whom, such injury was inflicted; and the statement so taken shall be reduced to writing and, if practicable, in the presence of the injured person.

SEC. 16. If, upon such view, personal inquiry or autopsy, the medical examiner is of the opinion that the death was caused by the act or neglect of some person other than the deceased, he shall at once notify the attorney-general, and coroner of the town where the body was found, or in which it lies, and shall file a duly attested copy of the record of his autopsy, or view, with the said coroner and

a like copy with the attorney-general; and shall in all cases certify to the officer having the custody of the records of deaths in the town in which the deceased came to his death, the name and residence of the person deceased, if known, or, when the name and residence cannot be ascertained, a description of the deceased, as full as possibly may be, for identification, together with the cause and manner by and in which he came to his death.

SEC. 17. The coroner shall thereupon hold an inquest, which may be private; in which case any or all persons, other than those required to be present by the provisions of this chapter, may be excluded from the place where such inquest is held, and such coroner may also direct the witnesses to be kept separate so that they cannot converse with each other until they have been examined. The attorney-general, or some person designated by him, may attend the inquest and examine all witnesses; and the coroner shall cause the testimony to be reduced to writing and signed by the witnesses. The attorney-general may, if he deem it necessary or expedient, direct an inquest to be held in the case of any casualty from which the death of a person results.

SEC. 18. The coroner may issue summons for witnesses, returnable before him. The persons served with such process shall be allowed the same fees, their attendance may be enforced in the same manner, and they shall be subject to the same penalties, as if served with a summons in behalf of the state in a criminal prosecution pending before a district court.

SEC. 19. The coroner shall, after hearing the testimony, draw up and sign a report, in which he shall find and certify when, where, and by what means the person deceased came to his death; his name, if known, and all material circumstances attending his death; and if it appears that his death resulted wholly or in part from the unlawful act of any other person, he shall further state the name of such person, if known to him, and he shall file such report, and the testimony by him taken, together with a copy of the record of the autopsy or view, in the office of the clerk of the court wherein an indictment for the offence may be found.

SEC. 20. The coroner shall bind such witnesses as he deems necessary, or as the attorney-general may designate, by recognizance in a reasonable sum, with sufficient surety, to personally appear, at such time as the coroner may designate, at the district court of the district wherein the inquest is held, and not depart therefrom until discharged by said court; and if any such witness shall refuse to recognize as aforesaid, the coroner shall commit such witness to the jail in the same county, there to remain until he shall so recognize or be otherwise discharged according to law.

SEC. 21. If the report of the coroner shall state that the death was caused by the unlawful act or by the gross carelessness of any other person, and by whose act the same was committed, he shall immediately make a complaint thereof against the person accused, in writing and on oath, to the justice or clerk of the district court in the district where the offence was committed, to the intent that the person killing or being in any way criminally instrumental to the death

may be apprehended; but nothing herein contained shall be so construed as to prevent complaint being made at any time before the finding of the report. And the coroner shall forthwith, in writing, notify the attorney-general of the complaint aforesaid, that he may appear by himself or some person appointed by him, at the examination, and prosecute the claim in behalf of the state.

SEC. 22. If a medical examiner reports that a death was not caused by the act or neglect of some person other than the deceased, and the attorney-general is of a contrary opinion, the attorney-general may, notwithstanding such report, direct an inquest to be held in accordance with the provisions of this chapter; at which inquest he, or some other person designated by him, shall examine all the witnesses.

SEC. 23. The medical examiner may, if he deem it necessary, employ a chemist to aid in the examination of the body, or of substances supposed to have caused or contributed to the death; and such chemist shall be entitled to such compensation for his services as the medical examiner certifies to be just and reasonable, the same being audited and allowed in the manner hereinafter provided.

SEC. 24. When a medical examiner views or makes an examination of the dead body of a stranger, he shall cause the body to be decently buried; and if he certifies that he has made careful inquiry, and that to the best of his knowledge and belief the person found dead is a stranger, having no settlement in any town of the state, his fees, with the actual expense of burial, shall be paid from the general treasury. In all other cases the expense of the burial shall be first paid by the town wherein the body is found, and such town may recover the money so paid from the town where such person last had a settlement: *Provided, however*, that the general treasurer, or any town, ultimately paying any such burial expenses, shall have the right to recover such burial expenses from the estate of the deceased person.

SEC. 25. When services are rendered in bringing to land the dead body of a person found in any of the harbors, rivers, or water of the state, the medical examiner may allow such compensation for such services as he deems reasonable; but this provision shall not entitle any person to compensation for services rendered in searching for a dead body.

SEC. 26. In all cases arising under the provisions of this chapter, the medical examiner shall take charge of any money or other personal property of the deceased, found upon or near the body, and shall deliver the same to the person entitled to its custody or possession; or if not claimed by such person within sixty days, then to an administrator, to be administered upon according to law.

SEC. 27. A medical examiner who fraudulently neglects or refuses to deliver any such property within three days, after demand upon him therefor, shall be imprisoned not exceeding two years or be fined not exceeding five hundred dollars.

SEC. 28. The fees of coroners shall, for the services specified in this chapter, be as follows, namely: For receiving and filing a duly attested copy of the

record of an autopsy, fifty cents; for every page of two hundred words of written testimony, thirty cents; for each day's attendance in holding the inquest, five dollars; for the recognizance of witnesses, thirty-five cents; and for drawing up and filing a report in court, five dollars. Said fees having been audited by the state auditor, upon certificate of the attorney-general, shall be paid by the general treasurer.

SEC. 29. Each medical examiner shall receive fees as follows: For a view without an autopsy, four dollars; for a view and an autopsy, thirty dollars; and for travel, at the rate of ten cents a mile to the place of view. He shall also have power, in case of an autopsy, to employ a clerk at an expense not exceeding three dollars per day for each day's actual service.

SEC. 30. Every medical examiner shall return an account of the expenses of each view or autopsy, including his fees, to the state auditor, and shall annex to his return the written authority under which the autopsy was made. The state auditor shall audit such account and certify to the general treasurer what items in such account are deemed just and reasonable, and such items shall be paid by said treasurer to the persons entitled to receive the same.

SEC. 31. Medical examiners shall, in the books provided by the secretary of state, keep a record of all views of bodies found dead, together with their view and autopsy reports, and, on the first of January, April, July, and October, shall forward to the secretary of the state board of health attested copies of such records of views, together with the view reports and conclusions from autopsies. Should the commission of service of a medical examiner expire before the end of a quarter, the said examiner shall at once forward to the said secretary of the state board of health the records and reports of all cases unreported at date of expiration of said service.

SEC. 32. For each and every copy of said records and reports forwarded to the said secretary of the state board of health, medical examiners shall receive twenty-five cents, which shall be paid by the state upon the voucher of said secretary of the state board of health that such copy of reports and records have been received by him.

SEC. 33. The secretary of the state board of health shall cause the returns received by him for each year, in accordance with this chapter, to be bound together with an index thereto; the state registrar shall prepare or cause to be prepared from the said returns such tabular results as will render them of practical utility, and shall make report thereof annually in connection with the report of births, marriages, and deaths required by chapter one hundred.

INDEX.

SEE ALSO CONTENTS, PAGE V.

Accidents, deaths from, 1903.....	20, 21, 36, 37, 72, 75, 188, 193
Accidents, deaths from, for thirty-eight years.....	194
Ages at time of death, disease, and sex.....	36, 37
Alcoholism.....	21, 27, 52, 64, 67, 195
Apoplexy.....	21, 37, 64, 67, 188-189, 197, 197-198
Appendicitis.....	21, 37, 55, 68, 71, 188, 199
Births, number of, in 1903, by towns and counties, sex and parentage.....	2, 4
Births, by months.....	6, 7
Births, plural.....	8, 136, 137, 138
Births, general results for fifty years.....	111-112
Births, comparative number by towns.....	113, 114
Births, ratio and proportion to population.....	116, 117
Births, proportion to population for thirty-five years.....	119
Births, diagram of.....	122, 123
Births, sex, forty years.....	125, 126
Births, sex and localities.....	126
Births, males to each 100 females.....	127, 128
Births, season.....	128, 129
Births, parentage.....	130, 131
Births, colored.....	132, 133
Births, number of child of mother.....	133, 134, 135
Births, ages of fathers and mothers.....	135
Births, nativity of mothers under 19 years.....	136
Births, still-born, in 1903.....	138, 139, 140
Births, still-born, for fifty years.....	111, 113
Births, illegitimate, in 1903.....	141, 142
Births, proportion of males to every 100 females for fifty-one years.....	168
Brain, diseases of.....	22, 37, 53, 188, 199, 191
Bronchitis.....	22, 37, 53, 54, 68-71, 188, 201, 202
Cancers.....	23, 24, 37, 38, 39, 51, 64-67, 188, 203, 204
Causes of death, alphabetically arranged.....	20-47

Causes of death by International classification, and percentage for 1903.....	48-59
Causes of death by International classification, for fifty-one years.....	60-75
Childbirth	24, 39, 56, 72-75, 205, 206
Cholera Infantum.....	24, 39, 188, 207, 208
Consumption, See Tuberculosis.....	
Croup.....	25, 40, 188, 217, 218
Classification (International) of deaths, with percentages for 1903	48-59
Classification (International) of deaths for fifty-one years.....	60-75
Deaths, number of, in 1903, by towns, counties, sex, and nativity.....	3, 5
Deaths, by months, sex, and divisions of the State.....	10, 11
Deaths, causes of, arranged alphabetically, by months, sex, nativity, and parentage.....	20-35
Deaths, causes of, arranged alphabetically, by age.....	36-47
Deaths, classification (International) and percentage in 1903.....	48-59
Deaths, classification (International) for fifty-one years.....	60-75
Deaths, general summary for fifty years.....	111, 112
Deaths, comparison of, to births and marriages in each town in 1903 and for past six years.....	113, 114
Deaths, number and ratio per 1,000 of population in each town in 1903.....	116
Death rates per 1,000 of population in 1903, and past seven years.....	118
Deaths, proportion of, to population for thirty-five years.....	119
Deaths, rate per 1,000 of population, by counties, for forty-three years.....	166
Deaths, causes unknown.....	183, 184
Deaths, in order, number, and proportion from thirteen principal causes.....	185
Deaths, from twenty-six principal causes.....	188, 189
Deaths, diagram of, showing number to each 1,000 of population in each town and county of the State in 1903.....	180, 181
Decedents, sex, number of males to every 100 females for fifty-one years.....	167
Decedents, season and mortality.....	169, 170
Decedents, nativity.....	171
Decedents, parentage.....	171
Decedents, age.....	172-173
Decedents, colored.....	176-177
Diarrhea and enteritis.....	25, 26, 40, 54, 55, 68-69, 188
Diarrhea and Dysentery.....	219, 220
Diphtheria and membranous croup	25, 40, 50, 64-67, 188, 221, 222
Divorces, number granted in 1903.....	158
Divorces, statute causes for.....	158
Divorces, applications and causes alleged in each county.....	159
Divorces, causes of application where divorcee was granted.....	160
Divorces, length of time married.....	160
Divorces, summary for thirty years.....	161
Divorces, proportion of marriages to each divorce granted.....	161

- Divorces, proportion of marriages to, in each county and whole State for
 thirty-five years.....162
- Divorces, ratio of divorces to marriages by counties for thirty-five years.....163
- Divorces, number of marriages to every decree of divorce to each New Eng-
 land State for twenty-six years.....164
- Divorces, laws governing registration of.....292
- Dropsy.....241
- Dropsy, compared with diseases of kidney and liver.....242
- Fever, malarial.....29, 43, 64-67, 223
- Fever, typhoid.....34, 47, 50, 64-67, 188, 223, 227
- Heart, diseases of.....27, 41, 53, 68-71, 188, 228-232
- Illegitimates.....141
- Influenza, grippe.....28, 42, 50, 64-67, 188, 232-235
- Insanity.....28, 42, 188, 235, 236
- International classification of causes of death, appendix.....281-283
- Kidney, diseases of, including Bright's.....28, 29, 43, 55, 68-71, 188, 237, 238
- Kidney, Bright's disease. See Kidney diseases.
- Laws in relation to registration of births, marriages, and deaths.....285-289
- Laws in relation to divorce.....292-294
- Laws in relation to marriage.....290, 297
- Laws in relation to medical examiners.....294-299
- Liver, diseases of.....29, 43, 55, 68-71, 188, 239, 240
- Malarial diseases, fever. See Fever, malarial.
- Marriages, number of, in 1903, by towns and counties.....2, 4
- Marriages, by months.....9
- Marriages, in comparison with births and deaths.....111-115
- Marriages, ratio to population in each division of the State...116, 118, 119, 120
- Marriages, ratio to population for forty-four years.....144
- Marriages, season.....145
- Marriages, nativity.....145, 146
- Marriages, denominational.....147
- Marriages, ages of the married.....148, 149, 150, 151
- Marriages, proportion of age to sex.....152, 153
- Marriages, number of times married.....154
- Marriages, colored.....155
- Marriages of the divorced.....156
- Marriages and education.....157
- Measles.....30, 44, 50, 64-67, 188, 243, 244

Occupations and ages at death.....	76-87
Occupations and causes of death.....	88-107
Occupations and ages of decedents for fifty-one years	76-87 268-273
Old age	30, 44, 57, 188, 245, 246
Paralysis.....	31, 44, 53. 64-67
Peritonitis.....	31, 45, 55, 68-71, 247
Pertussis (whooping cough)	31, 45, 50, 64-67, 255, 256
Pneumonia.....	31, 45, 54, 68-71, 188, 247-250
Population, proportion of births, marriages, and deaths to (geometrically estimated), for thirty-five years.....	119
Returns of medical examiners.....	277
Results, comparative, twenty-five years.....	257, 259
Rheumatism.....	32, 45, 51, 64-67, 188
Scarlet fever.....	32, 45, 50, 64-67, 188, 250, 251
Scarlet fever, diphtheria and croup, by season.....	252
Still-born children.....	138, 139
Still-born children, for fifty years.....	140
Suicide.....	33, 46, 72-75, 188, 253, 254
Tuberculosis (consumption).....	34, 47, 51, 64-67, 188, 209-216
Whooping cough (pertussis).....	31, 45, 50, 64-67, 255, 256

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